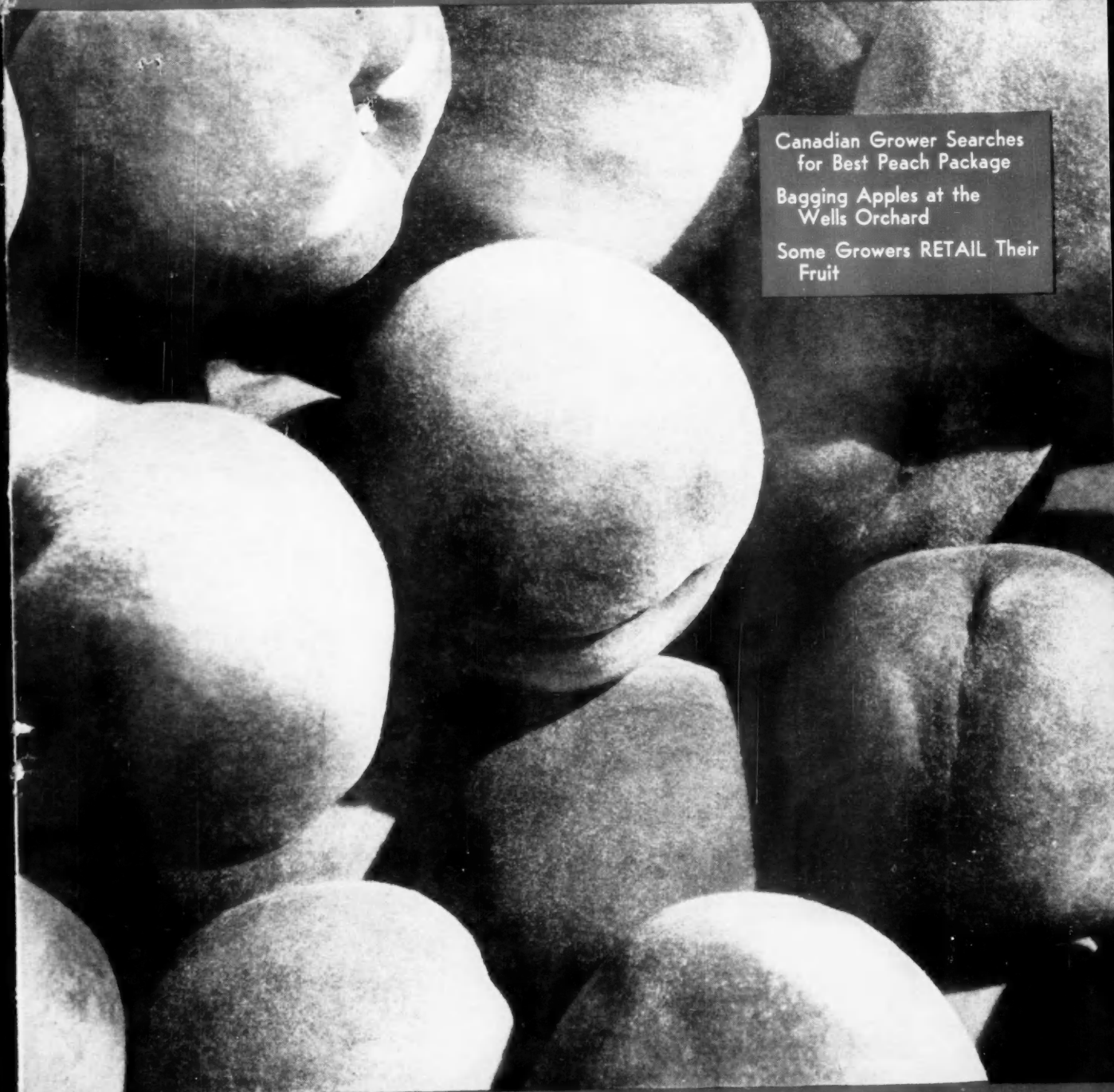


American Fruit Grower

WESTERN EDITION

AUGUST • 1958

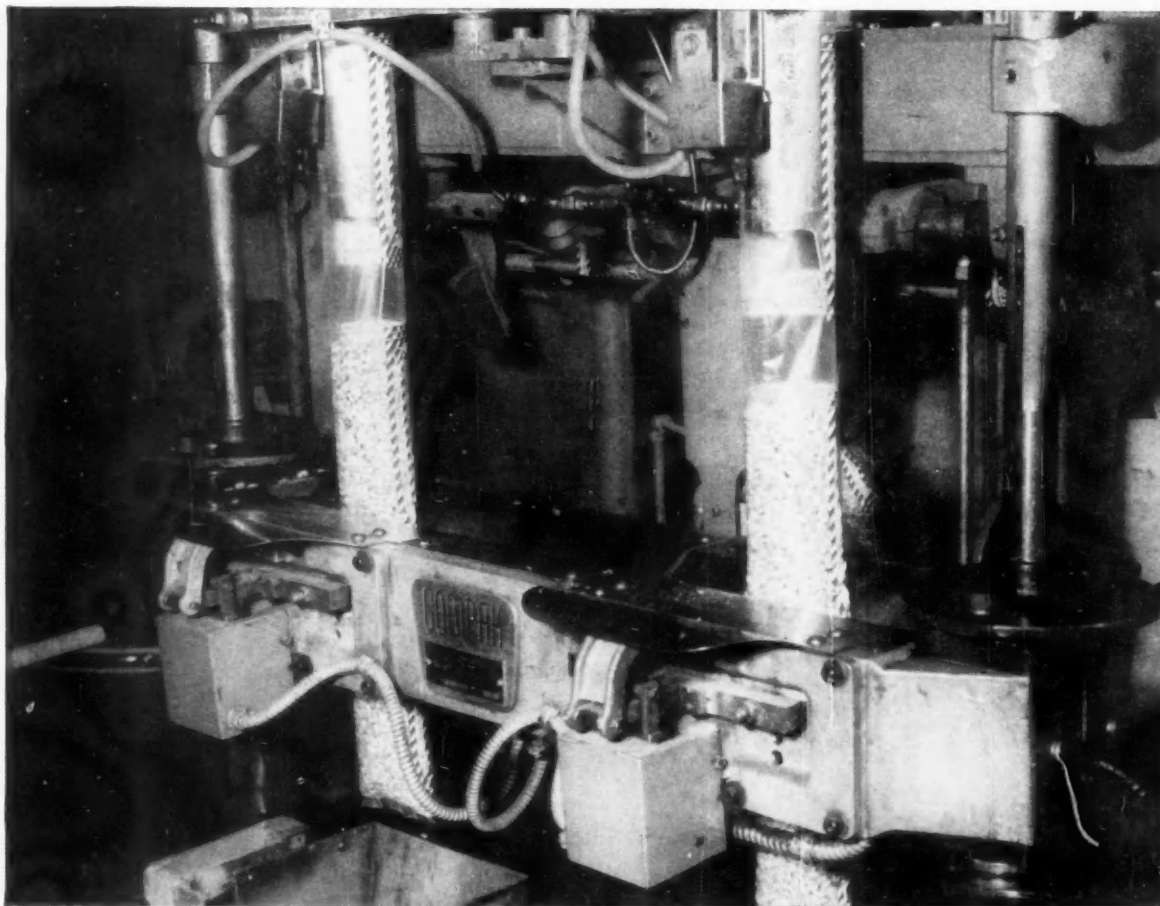


Canadian Grower Searches
for Best Peach Package

Bagging Apples at the
Wells Orchard

Some Growers RETAIL Their
Fruit

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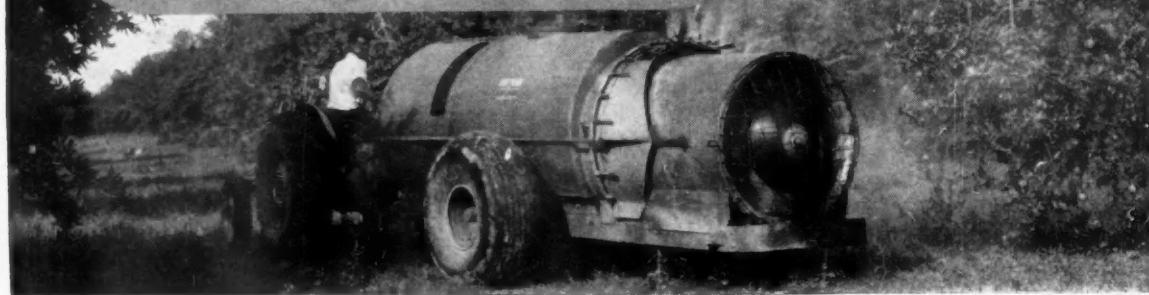
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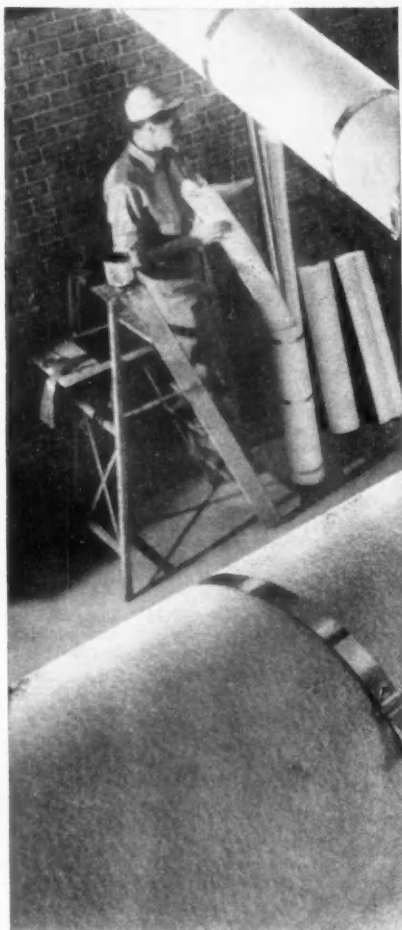
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AUGUST, 1958



American Fruit Grower

Cover photograph by H. Armstrong Roberts.
Total U.S. peach production in 1958 is estimated
at 74.5 million bushels, 19% larger than in 1957.

VOL. 78

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LETTERS TO THE EDITOR

Apple Consumption

Dear Editor:

I noticed the letters on apple consumption (April, 1958). It is true that consumer consumption of apples is lower than years ago, but other factors must also be the reason; among them is the increased consumption of citrus fruits.

I do not agree with Mr. Moore and Mr. Ten Eyck on variety. We have one of the largest retail roadside markets that I know of and just try and sell some of those old varieties. Unless one has the newer varieties, he would go broke in a short time.

We were caught with some old varieties like Baldwin, R. I. Greening, and Hubbardston, and had to pull them out as we could not sell them for the prices we have to get to make money.

Now, in regard to a red apple, if consumers come in for apples, they naturally pick a red apple. So I would say to these gentlemen, get your apples where good apples are grown for flavor, not for show. As for varieties, we all have our tastes, but the eyes do 50% of our tasting for us.

As for the apples you get from the grocery store, chances are they were in the store several days and as a result deteriorated from the heat in the store. All grocers should keep their apples under refrigeration the same as they do vegetables. Some grocers do keep their apples cool, but the day is not far off when all of them will.

Goshen, Ind.

W. W. Kercher
Sunrise Orchards, Inc.

Dear Editor:

In your April issue I noted a letter from John A. Moore, Crawfordsville, Ind., about apple varieties, with which I wholly agree. Consequently I am planting some old time apple varieties and have obtained Turley Winesap and Baldwin so far. I have looked in vain for Russets and Pippins. From Mr. Moore's letter I gather that Russets may be available. Can you help me?

Denver, Colo. Robert A. LeMassena
Golden Russet trees are sold by Greening Nursery Co., Monroe, Mich. Also, one of our readers, Sterling Rouse, Florence, Ky., has kindly offered to send scions of his Roxbury Russet, as long as the supply lasts, for the cost of postage.—Ed.

Dear Editor:

I read the two letters in your April number about the poor eating quality of apples. I certainly agree with both of these people.

We used to buy apples by the box and keep some on hand most all the time. We do not any more. They do not keep. They do not taste good. They are too expensive. We can get bananas, oranges, grapes, coconuts, and pineapple occasionally for less money so why should we buy apples that are almost tasteless and sometimes somewhat bitter?

Arlington, Calif.

Mrs. Mabel Tupper

Dear Editor:

The two letters on consumer reaction and grower reaction should give us apple growers food for thought. I have often said that what sells the Red Delicious apple is its looks and the name.

Walter J. Wait

AMERICAN FRUIT GROWER

Grenoble Walnut

Dear Editor:

My letter about the Grenoble walnut, published in your August, 1956, issue, brought me so many letters asking for seeds that many of them have not yet been answered. I have no seed.

The tree I found in Tehama County has been declared by specialists of the Davis State Farm to be a hybrid of Northern California black and English walnuts possessing superior characteristics as a root-stock.

I have only a couple of trees doing wonderfully, but am preparing to graft 200 or more bigger trees on several ranches along the Auburn Ravine, so there will be some seeds for those who can wait.

Newcastle, Calif.

A. Laforge

Bruising

Dear Editor:

I believe that 90% of bruising is caused by or in the picking bag. I have tried every kind and have discontinued using bags. Now my trees are topped down to a maximum of 12 feet and we use half bushel, handled picking baskets. The filled baskets are hauled to the packing house on spring wagons and there is only one emptying at the packing house.

This method is not so fast as some of the others, but bruising is eliminated, the fruit brings a better price, and the commission merchant likes to handle bruise-free fruit.

Farmington, Mo.

E. Longenecker

CALENDAR OF COMING MEETINGS & EXHIBITS

Aug. 4—Orchard tour, Spokane, Wash.
Aug. 5—Orchard tour, Okanogan, Wash.
Aug. 6—Field day, Washington State College Tree Fruit Experiment Station, Wenatchee, Wash.

Aug. 7—Orchard tour, Wenatchee, Wash.
Aug. 8—Orchard tour, Yakima, Wash.
Aug. 11-12—Summer tour in Champlain-Freelandsburg Canadian area, New York State Horticultural Society—D. M. Dalrymple, Sec'y, Lockport, N. Y.

Aug. 11-15—25th annual Citrus Growers Institute of Florida Agricultural Extension Service, Camp McQuarrie Tavares—R. E. Norris, Lake County Agri'l Agent, Tavares, Fla.

Aug. 12—Klickitat-Skamania tree fruit tour, White Salmon, Wash.

August 12-13—Ohio Pesticide Institute, Ohio Agricultural Experiment Station, Wooster.—J. D. Wilson, Sec'y, Wooster.

Aug. 13—Grape Commodity Day, Washington State College Irrigation Experiment Station, Prosser, Wash.

Aug. 13—Tours of Horticulture Farm, Michigan State University, East Lansing.—A. E. Mitchell, Dept. of Hort.

August 14—Orchard Day, Ohio Agricultural Experiment Station, Wooster.

Aug. 14—Orchard tour, Kennewick, Wash.

Aug. 14—Annual Wisconsin-Minnesota orchard tour, Connell's Sunridge Orchard, Menomonie, Wis.—J. D. Winter, Sec'y, Minnesota Fruit Growers Association, 719 S. E. 5th St., Minneapolis 14, Minn.

Aug. 18-20—Northern Nut Growers' Association 49th annual meeting, USDA Plant Industry Station, Beltsville, Md.—Spencer B. Chase, Sec'y, 2338 Parkview Ave., Knoxville, Tenn.

Aug. 20—State pomological field day, Highmoor Farm, Monmouth, Maine.

Aug. 20—Purdue University departments of horticulture and plant pathology Orchard Day, Purdue University, W. Lafayette, Ind.—R. B. Tukey, Assoc. in Horticulture, Purdue University.

Aug. 21—Seventh annual Grape Day, University of California vineyards on Davis campus.

Aug. 24-28—American Society for Horticultural Science annual meeting, University of Indiana, Bloomington, Ind.—Roy E. Marshall, Sec'y, Michigan State U., East Lansing.

Sept. 8-9—United Fresh Fruit and Vegetable Association, tenth annual merchandising and management conference, Morrison Hotel, Chicago—association offices: 777 14th St., N.W., Washington 5, D.C.; 903 Grand Ave., Kansas City 6, Mo.

Sept. 9—Openhouse at new Ohio Agricultural Experiment Northwestern Substation, Hoytville, program on crops, tillage, and drainage.

AUGUST, 1958

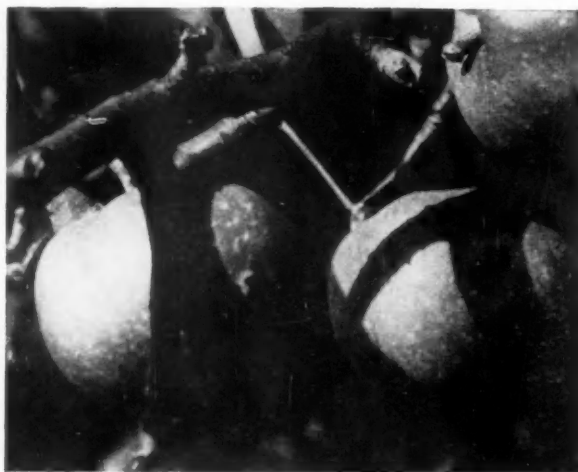


Which is more important . . . your spray costs or your profits?

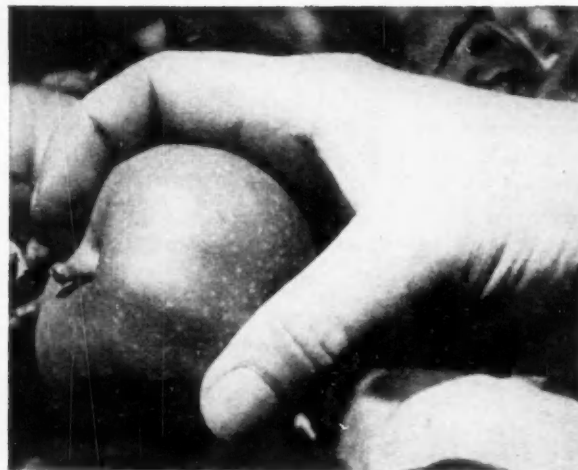
Smart apple growers agree: it's *profits* that count. That's why they prefer Captan to so-called "bargain" sprays. It's the most dependable *all-season* fungicide available. From pre-pink to harvest, Captan has proved to be the best disease control money can buy. Year after year it gives you increased yields and bigger profits. Captan is not only compatible with insecticides, but it also won't injure fruit or foliage. Other advantages of Captan include better fruit finish . . . improved keeping quality . . . and superior control of major fruit rots and other summer diseases, including "after rain" scab protection. Ask your local dealer for your free copies of Captan Spray Charts for apples and peaches.



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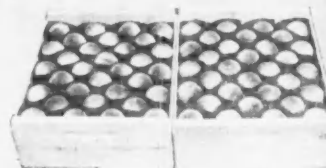
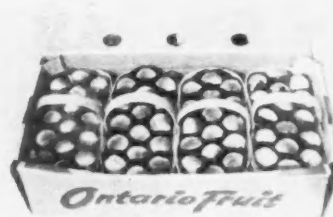
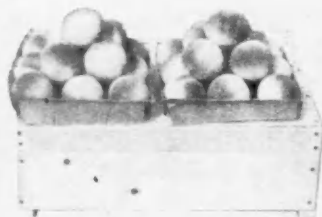
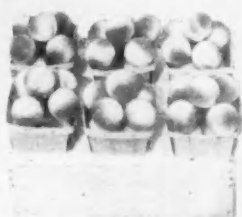
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**American
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• Fruit for Health •

My Search for a BETTER CONTAINER

**Prominent Canadian grower tells of his experience
packaging peaches for the retail and wholesale trade**

By A. GRANT FOX

SINCE growing peaches is my business, the object of my research efforts with containers has been directed toward finding a better unit for packing, shipping, and selling this fruit.

A container must be satisfactory with the trade. Of first importance is buyer approval. A container may be the best from a theoretical point of view but useless if no one buys it.

A container must have sales appeal. It is one thing to sell peaches at the orchards and nearby markets for local consumption, and an entirely different thing to ship peaches in carload and truckload lots to be sold through the channels of trade on distant markets.

In the production areas, transportation difficulties are nonexistent. It is possible and imperative to supply consumers and local retail stores alike with peaches eating-ripe, fresh from the orchard. In this field there is no such thing as a better container. Paper bags holding as few as a half dozen luscious fruits as well as heaped bushel hampers are all equally good containers at the orchard retail sales barn.

As a rule, growers want peaches in bushel-basket quantities, while urban

dwellers want them in smaller quantities. Local retailers want them in both bushel and smaller-size containers.

Nearly all the peaches grown in Ontario are sold in 6-quart baskets. When the 6-quart basket is heap-packed with ripe peaches, fresh from the trees, it weighs about 11 pounds net.

For shipment to distant markets to be sold through the channels of trade, the 6-quart basket is cup packed with two layers of peaches and weighs 8 pounds net. It is shipped in a 4-basket master container that carries the fruit in good condition to destination. It is well liked by consumers who prefer peaches in quantities of 8 pounds.

Because of changes that are taking place in self-service store practices and in consumer buying habits, the 6-quart basket is losing ground to smaller consumer packages that are being packed at point of retail sale, with peaches imported in bulk containers from the U. S.

The 6-quart basket has a bottom layer that is not easy to see or examine, and consumers are becoming increasingly reluctant to pick up a package with part of the contents not in full view. From the standpoint of an 8-pound consumer-size unit, the 6-quart basket is the best container on the market.

I have spent a considerable amount

PANEL ILLUSTRATION

Containers shown in panel at top of page are, from left to right:

8 peach berry box; weight 2 pounds when filled.

14 peach pyramid; weight 4 pounds.

4 six-quart baskets in Ontario 4-basket master container; weight 8 pounds each.

Standard Los Angeles lug, crinkle-cup packed with two layers of 2½-inch peaches.

of effort in trying to produce or find a consumer-size container capable of holding from 2 to 3 pounds of peaches—one that is adaptable for shipment in a master container and that would satisfactorily sell wholesale through the channels of trade.

I found some good containers that were theoretically satisfactory in many ways. However, at self-service markets the housewives passed them up.

The number one reason for slow sales was the lower price of similar size competitive packages which were made up at the self-service store from bulk containers.

The number two reason was that consumer-size packages, when packed at production level and shipped for some distance, arrive at the retail store somewhat bruised and travel-soiled in appearance.

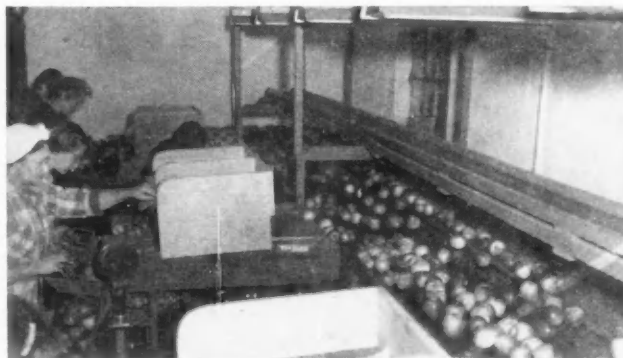
When consumer units are packed
(Continued on page 29)

PREPACKAGING...

at Grower Level?

The trend toward more prepackaged products is growing. Where will this service take place?

This article is an abstract of a talk given by Gerald A. Awes at the Transportation of Perishables Conference held this year at University of California, Davis. The author is president of Lucky Stores, Inc., San Leandro, Calif.



Prepackaging at the grower-shipper level—this is the logical point at which the greatest savings are realized and the maximum efficiency is achieved.

at Retail Level?

By GERALD A. AWES

REPEATED tests have shown that the prepackaged product has a longer shelf life and less shrinkage; quality control can be closer; inventory control is simpler; and cost of handling is less. A major advantage is that the product shipped is all salable.

Where is this prepackaging going to take place?

Viewpoints of operators vary according to area and type of operation. Generally speaking, prepackaging has been practiced by operators in the eastern and midwestern parts of the United States to a much greater extent than anywhere else. Pacific Coast markets have resisted to a great degree the broad usage of prepackaging and have stuck quite closely to a few major items.

In eastern areas prepackaging at the present time is being done in most stores on the premises. Some service wholesalers prepackage in a warehouse operation for their customers or, in the case of a chain store, in their own warehouse. Some prepackaging is being done in the fields by growers or shippers.

One of the most successful warehouse operations is that being conducted by Publix Super Markets in Lakeland, Fla. They have been expanding this operation the last several years and are definitely sold on the success of their program. They



Prepackaging services in eastern areas are predominantly conducted at store.

are prepackaging most of their produce at the central warehouse and expect to prepackage 100% of their product within a few years.

Many of the eastern operators who prepackage at the store level would prefer having a service wholesaler or the grower perform this function on everything except the most fragile items, providing quality control was strict and the cost for this prepackaging reasonable. The large markets, whose volume and size permit, seem to favor the control offered by in-store packaging.

A survey published by *Super*

Market Merchandising magazine in September, 1957, pointed up some interesting factors regarding prepackaging. This survey was conducted among 90 companies in the nation operating 2290 stores. It showed first that more prepackaged items are sold by smaller firms than by the larger ones, which also was the pattern for self service meats.

This survey selected the top items in the produce business, accounting for at least 80% of total produce sales, and reported all these items being sold in some prepackaged form. Of these items all but four

(Continued on page 27)



Large supplies of uniformly graded apples are required by supermarkets. At the Wells Orchard the size of polyethylene bag used is governed by retail price of apples and size of the crop.

How APPLES Are Bagged at the Wells Orchard

About 20,000 bushels of apples at this Ohio orchard go into poly bags. The orchard manager tells how it's done

By HOWARD WELLS

THE rapid increase in the number of supermarkets and their methods of merchandising fruit and produce require larger supplies of fancy, uniformly-graded apples than can be readily supplied by the average small grower.

The prepackager who can assemble apples from a number of smaller producers, package and distribute them to the larger grocery chains, is performing a service to the apple industry by making it possible for the grower, with a few thousand bushels of apples, to find an outlet for his fruit.

At the H. M. Wells & Son orchard, in Vinton County, Ohio, apples in the most suitable sizes for prepackaging, 2¼ to 2¾ inches, are marketed in one of two ways.

After careful grading and sizing of the fruit at harvest as it comes from the orchard, the apples are stored by variety, size, and grade, to be marketed later as required.

The apples in the prepackaging sizes are either packaged at the orchard for the supermarket trade, or are sold to a prepackager who assembles and prepackages fruit in quantity for the growing chain store markets.

Final grading is done at the time of packaging when those apples not up to grade, that were missed when the fruit was first sized and graded, are removed. Only fancy and extra fancy grades are packaged in 3-, 4-, and 5-pound polyethylene bags. The size of package will vary from season to season, depending on the retail price of apples and the size of the crop.

From 14,000 to 20,000 bushels of apples are packaged annually from this orchard. Of this amount, 70% of the pack is Red and Regular Rome. The remaining 30% is made up of Stayman, Grimes, Red and Golden Delicious.

All apples packed in consumer packages at the Wells orchard are hand packed by a crew of three to five people, depending on the speed with which the orders must be filled.

Equipment used is kept at a minimum with two packing tables, an over and under scale, and a mechanical bag closer. One man dumps the apples on the packing tables, places the filled bags in the master container, and stacks the filled masters on the loading dock. Women who fill and weigh the bags are employed on a piece work basis of 1 cent per package.

All packaged apples are packed in

cardboard master containers, with dividers inserted in each master to give strength to the package and prevent bruising of the apples from rough handling and careless stacking.

The large sizes, which do not pack readily in the smaller consumer packages, are packed in bushel cartons for the bulk trade or sold to special markets that use apples 2¾ inches or larger in size.

Apples culled out for color or minor defects are sold to processors, truckers, or are used for cider making.

THE END

C-A Automation

THE introduction and use of intermittent time clocks on carbon dioxide scrubbers marks the first step in automating control of the controlled atmosphere apple storage process.

John W. Zahradnik and Franklin W. Southwick, University of Massachusetts, Amherst, have solved the problem of programming CO₂ scrubber operation by wiring the clock into the power supply circuit for the scrubber fan and circulating pump. The time clocks reduce operating time and attention required by a manual scrubber, explain the two men.



State REPORTS

WESTERN EDITION

Less Bruising of Cannery Peaches

FEWER canning peaches were bruised last year during handling from orchard to cannery, and the average case yield for the state of Washington was up.

That optimistic situation is the result of a handling program which got underway three years ago by Washington State Fruit Commission.

Main reason for the improvement program, states Fred H. Westberg, secretary-manager of Washington State Fruit Commission, was that canners of Northwest Elbertas were experiencing severe losses due to careless picking habits. While the damage done to the peaches was caused in large part by the pickers themselves, it was generally acknowledged that supervision by growers and their foremen was at least in part responsible for the condition.

The first thing attempted in the campaign was to arrange a meeting between leaders of the Washington peach industry, including officers and directors of Washington State Peach Council and Washington State Fruit Commission and processors of Washington peaches and their grower contact personnel.

Possible remedies were considered and, as a result of this meeting, the following things were done the past several seasons:

1) Grower meetings were held in each of the principal peach growing areas at which a varied program was presented supporting the thesis of more careful peach harvesting practices.

The program consisted of discussion, skits, statements by leading growers, and, during the second year, the use of a specially prepared training film.

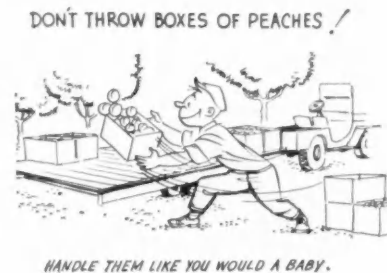
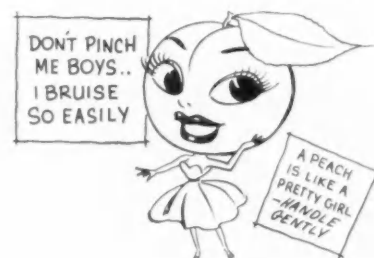
2) The next step was to get the help of Washington State College Experiment Station in a research project to determine just where and when bruising was occurring. This project, carried on under the direction of Dr. P. C. Crandall of Washington State College, measured bruising in a variety of peach orchards under different degrees of supervision and also where peaches

were in several different stages of maturity.

Dr. Crandall's work brought out the importance of adequate instruction and supervision to peach pickers. He also brought out the importance of not delaying peach harvesting until peaches were soft-ripe.

Most bruising, according to this (Continued on page 26)

Series of cartoons prepared by Washington State Fruit Commission for use in orchards and warehouses. They're helping in the campaign to reduce bruising of peaches in Northwest orchards.





Work horse—'58 style

New '58 Dodge Power Giants do a handsome job . . .
are 4-way leaders of the low-priced 3

Here's a thoroughbred you needn't gentle . . . a new kind of truck that's built for action and looks it. And today's all-new Dodge *Power Giants* for '58 are even easier on your pocketbook than they are on your eyes. In fact, they lead the low-priced three in all four big ways that mean most to farmers.

First in Styling! You get the look of tomorrow in your new Dodge *Power Giant*. From massive chrome grille and striking dual headlights to smart new luxury cab interiors, these trucks are styled to stay new for years.

First in Power! You get up to 24% more work-saving power with a new '58 Dodge. This extra power reserve reduces engine wear and repairs.

First in Payload! You get a bonus in load-carrying capacity no competitive make can offer. Unique *Power Giant* construction lets you haul up to $\frac{1}{2}$ more each trip.

First in Economy! You get dollar-saving mileage and long-range, low-cost engine upkeep with Power-Dome V-8 engine design . . . and only Dodge has it.

Remember . . . handsome is as handsome does . . . and these all-new Dodge *Power Giants* are built to do a man-sized job handsomely, year in, year out. What's more, *they're priced with the lowest!* Why not see and drive your choice of these rugged new trucks—V-8 or Six—at your Dodge dealer's soon?

DODGE *Power Giants*

State NEWS

- California Peaches 'Swim' to Cannery
- Apple 'Shrinkage' Cost Eastern Growers a Million Dollars

Swimming Peaches

CALIFORNIA — Cling peaches picked this year on the Onstott Ranch, Gridley, Butte County, went "swimming" on their trip to the nearby cannery. Water was used as a "cushion" against bruising in handling the peaches from trees to processing plant.

Here's how the system works. Peaches are picked and placed "dry" in wooden bulk bins holding 40 lug boxes of peaches per bin. When full, bins are hauled on pallet wagons to the central yard area of the 260-acre orchards where a specially-designed fork lift hoists the boxes and dumps the fruit into a water-filled vat. From the vat the peaches are elevated and deposited on a traveling mesh screen where twigs and leaves are removed.

Next the peaches go to the sorting table for inspection, with the quality fruit moving to the end of the table and falling by gravity into steel bulk bins filled with 1260 pounds of pure water (from a state-tested and sealed pump) at about 65° F. The bins travel to the end of roller conveyors and are loaded by a fork lift onto trucks for the trip to the cannery. Water is poured from the bins at the cannery.

Besides less bruising, the system eliminates peach fuzz, reduces shrinkage, and results in firmer fruit. This means better quality control, and the grading of peaches by a trained crew of sorters further insures better quality at the cannery line, with less dockage for the grower. Labor is saved in picking and handling by lug handling and filling.

The short time that the peaches are in water and the resulting drop in temperature from orchard temperature has helped rather than hindered the peach, according to Charles Herrington, orchard superintendent and inventor of the method. The orchard is capable of sending 10,000 lug boxes of peaches per day through the swimming peach system.

The 'Shrinking' Apple

PENNSYLVANIA—Apple quality may be judged by size and attractive color. But only upon opening the fruit can its true worth be revealed. This fact was reported to have cost eastern growers over \$1 million this past season. Apples which outwardly exhibited high quality proved, on opening, to have internal breakdown.

The lack of adequate moisture in 1957 has been suggested as one of the causal factors. However, the flesh disorders were also found in some irrigated orchards, but to a much less extent.

Here is some interesting information: The rate of apple enlargement apparently is influenced largely by night temperatures. However, data for 1957 revealed that during the morning hours apples can actually lose size or shrink. In some instances the amount of shrinkage was almost as great as the amount of preceding night enlargement. Shrinkage

occurred quite frequently during the months of June and July but almost none in August, at University Park, Pa.

York Imperial apples enlarged daily exactly the same amount as Rome Beauty, but shrank during the same period twice the amount as did Rome Beauty. The question still remaining to be answered is the possible influence of shrinkage on the internal quality of the fruit. Various flesh disorders such as internal breakdown have been associated, in a general way, with growing season climate.

Shrinkage of fruits is primarily a result of moisture being withdrawn from the fruit by the leaves under conditions of high rates of leaf transpiration, accompanied by a reduced rate of moisture uptake by the roots. Trees carrying a light crop should exhibit more fruit

shrinkage than trees with a heavier crop.

There is every reason to believe that the tree can also act as a storage organ of moisture, and, therefore, tree vigor might also influence the amount of shrinkage. Seasons with a deficiency of rainfall would have a reduced amount of available moisture. Further, during a drought air temperature is usually quite hot with intense radiation from the sun. Under these conditions we can expect a considerable moisture stress within the plant.

Irrigated trees might also show a stress but not to the same extent as nonirrigated ones. During the night hours with almost a lack of transpiration, both the tree and the fruit would regain turgidity and enlarge. Under a prolonged drought, any reserve of moisture within the plant to damper excessive transpiration rates during the daylight might be depleted. This would result in more shrinkage as the drought progressed.

The significance of this is that the

FRUIT PEST HANDBOOK

(SIXTY-SIXTH OF A SERIES)

FALL WEBWORM

THROUGHOUT most of the United States and Canada many deciduous fruit and shade trees as well as shrubs, including apple, pear, and nut trees, often contain unsightly webs near or over the ends of branches during the summer and early fall. These are formed by an insect known as the fall webworm.

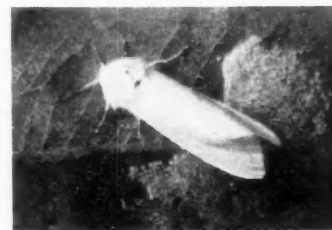
The webs are started by the young caterpillars that feed in colonies on foliage within the webs, enlarging the webs as they grow. Several colonies may defoliate a tree. The light brownish caterpillars are somewhat hairy and have a row of blue spots along the back. When full grown they are about 1 1/4 inches long. As they near maturity they scatter over the host plant to feed until full grown.

When growth is completed the caterpillars spin cocoons in sheltered places, particularly in debris on the ground, where they overwinter. The moths emerge early in the summer and deposit eggs in flat masses of 400 to 500 each on the underside of the leaves. White hairs from the body of the adult moths more or less cover the egg masses. One generation occurs in the Pacific Northwest and other northern areas, and two generations, farther south. In the one-generation area webs are formed from July to September, and in the two-generation area, in June and July and again in August and September.

Control—As soon as the first webs are observed, spray infested trees with lead arsenate or 50% DDT wettable powder, using 2 pounds per 100 gallons. Allow an interval of 40 days between the last application of lead arsenate and harvest of apples and pears, and 30 days for other tree fruits. Allow an interval of 30 days between the last application of DDT and harvest of tree fruits. However, on apples and pears allow an interval of 40 days if five or more applications are made. The colonies, if within reach, can be destroyed by tearing the webs apart and destroying the caterpillars, or by burning. In burning the webs, care must be exercised not to injure the tree.—Howard Baker, USDA.

Photos show, top to bottom:

Nest formed by fall webworm on pear leaf. Adult webworm laying eggs on pear leaf. Webworm larva shown here on apple leaf.



Photos: Courtesy USDA.

AMERICAN FRUIT GROWER

degree and time of occurrence of fruit shrinkage may be an important contributing factor to the extent of flesh disorders previously believed associated with climatic factors. Nutritional and cultural practices undoubtedly exert an influence. Varietal differences in shrinkage and in internal flesh disorders are also present. Work is being continued to explore these possibilities.—Loren D. Tukey, Penn. State U., University Park.

PEACH TREE BORER CONTROL

Now's the time for New Jersey growers to spray peach tree trunks to control borers, says Dr. Leland G. Merrill, Rutgers University extension service entomologist, New Brunswick. Get busy when adult wasplike moths begin laying their eggs in July and continue your program through August. DDT sprays applied to the tree trunk will prevent infestation by the tiny grubs which hatch from the eggs laid on the bark. Other control methods are also available; for more information, write your county agricultural agent for Leaflet 186, *Control Peach Tree Borer*.

New Apple Container

WASHINGTON—A new all-pine tray pack container, believed to be the first all-wood apple box designed to accommodate standard apple trays, has been introduced in the Northwest.

Developed and produced at Chelan Box & Mfg. Co., Chelan, the new box is built to standard trade dimensions, will ship under the same weight standards as the fibreboard carton, and can be used as a field picking lug, explains Fred Milburn, general partner in the Chelan company.

Milburn points out that Chelan Tray Pack Box can be easily assembled by any box-mailing machine with minimum adjustments and can be handled in the warehouse or orchard with present equipment, such as lift trucks or straddle trailers. One-piece sides and bottom construction provide ventilation and enable the warehouse to pack directly into the trays and store the fruit throughout the marketing season. The box also nests well for easy storage or transportation.

The box is available through the Chelan firm or H. R. Spinner Co., Wenatchee.

Increase Apple Fee

MICHIGAN—Apple growers voted 5 to 3 for an increase in their promotion fee from 2 to 3 cents per bushel, effective this season. The increase is expected to raise \$225,000. Besides taking an active part in the national health-value apple promotion campaign as well as promoting its own crop, Michigan Apple Commission, under the direction of H. F. Patterson, manager, is setting up a grower-information program patterned after that of Florida Citrus Mutual.

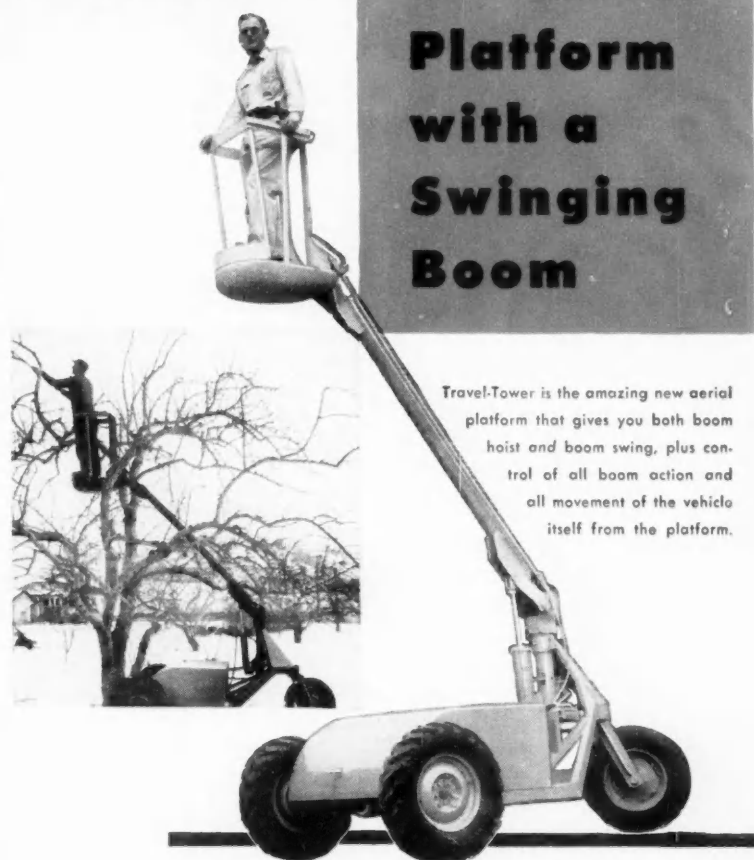
Noted Pomologist Dies

MASSACHUSETTS—Dr. J. K. Shaw, noted leader in pomological research, passed away recently at the age of 80. Dr. Shaw was research professor of pomology at Massachusetts Agricultural Experiment Station until his retirement in 1947, after 38 years of service to the fruit industry. He was a keen student of fruit varieties, a pioneer in his studies on the interrelation of stock and scion, and the originator of the system for identification of fruit varieties by their leaf and other vegetative characters in the nursery row. He was the recipient, among other awards, of the Wilder Medal of American Pomological Society.—A. P. French, U. of Mass., Amherst.

AUGUST, 1958

NOW!

An Aerial Platform with a Swinging Boom



Travel-Tower is the amazing new aerial platform that gives you both boom hoist and boom swing, plus control of all boom action and all movement of the vehicle itself from the platform.

Travel-Tower

At last, here is a completely versatile aerial platform for picking, thinning and pruning. On Travel-Tower's platform you move yourself up and down with effortless ease. But more than that, Travel-Tower also gives you a swinging boom. And, you control every movement, including travel of the vehicle itself in any direction, from the platform. Developed and proved in orchards of the Pacific Northwest, Travel-Tower has made it possible for many owners to eliminate outside labor completely, except at the peak of the harvest season. Exceptional stability, easy adaptation for use with air tools, 82" turning radius . . . these are just a few of the outstanding advantages that make Travel-Tower the most amazingly versatile piece of orchard equipment you've ever seen. Get all the facts today.

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Travel-Tower is manufactured by **PITMAN MFG. CO.** 300 W. 79th Terr., Kansas City, Mo.

Apples

Full Speed Ahead

IT'S full speed ahead on national apple promotion for this coming season. At the annual meeting of National Apple Institute held in Washington, D.C., in June plans were laid to continue the national promotional program. The careful attention given to laying the groundwork is now beginning to achieve substantial results.

Despite the withdrawal from the national organization of Washington State Apple Commission, which contributed heavily to the national program, plans were made to continue on a level similar to last year's effort. Fulfillment of these plans depends on approval of a new schedule of contributions to the promotional fund and to the general operating fund of NAI by its regional and state organizations.

Delegates of the member organizations were in agreement regarding the importance of the national promotional effort to let consumers know the healthful qualities of the apple. Said one delegate, "We feel



Newly elected officers of National Apple Institute are, left to right: C. B. Lewis, Riverton, N.J., re-elected board chairman; Ralph F. Foreman, Northville, Mich., re-elected secretary; Ben W. Drew, Westford, Mass., president; Patterson Bain, McBaine, Mo., re-elected treasurer. Not present but elected vice-president was J. E. Klahre, Hood River, Ore.

children's teeth and health, the lead of the apple growers is being eagerly followed by teachers and dentists. NAI advertisements in teachers' magazines and medical journals are spreading the word to the professional people who wield great influence on family eating habits.

Size of the apple crop was forecast at around 112 million bushels. Prospects seem good in all parts of the country except for scattered frost and hail damage in some areas.

Washington is again looking forward to a substantial crop with 28 million bushels forecast. Next largest prediction is for New York with nearly 17 million, followed by Virginia with 10.5 million, and Michigan and California with approximately 10 million each.

In assessing the prospects for marketing the crop, it was reported that the carryover of canned apples (slices and sauce) on September 1 would be about 2.5 million bushels fresh equivalent compared with 2.9 million on the same date last year.

A note of more than ordinary significance is that the movement of apple sauce may set a record high for the season 1957-58, but the movement of slices is behind the preceding year.

A total of 37 million bushels is expected to go into processing. The export market may take 2.5 million bushels, it was forecast, compared with the good movement of the past season of 5 million bushels. This would leave approximately 72 million bushels for fresh market consumption compared with 77 million in 1957, 62 million in 1956, and 67 million in 1955.

Delegates unanimously approved a resolution calling for study of grade standards, both U.S. and state, and investigation of effective standards for maturity and condition. To prevent surplus buildups of apples in market channels, state and regional groups were called upon to develop voluntary promotional programs and to take the necessary steps to hold back the supply.

Next year's meeting will be held at Lake Placid, N.Y., with the New York and New England Apple Institute as host group.

Vapam Supplied Solely by Stauffer

IN the July, 1958 Buyer's Guide issue of AMERICAN FRUIT GROWER, under the heading of "Soil Fumigants" on page 32, a company other than Stauffer Chemical Company is listed as a supplier of "Vapam" soil fumigant.

"Vapam" is Stauffer Chemical Company's registered trade name for sodium methyl dithiocarbamate soil fumigant and Stauffer is the only company entitled to use this name to describe such a product.

Stauffer is the sole source of "Vapam" soil fumigant for sale to U. S. buyers.

FRED MOTZ HONORED

Applemen during the NAI annual meeting honored Fred Motz, foreign fruit specialist, with a citation for his long years of service to the fruit industry. Mr. Motz has retired after more than 20 years of government service in Europe. He was on the staff of Virginia Polytechnic Institute before going abroad and plans to retire to a "farm" he recently purchased on tidewater land in Virginia. The citation was presented to Mr. Motz by C. B. Lewis, NAI board chairman.

in our state that the importance of the national promotional program for apples cannot be overemphasized. We will go all out to raise the necessary funds."

Bulwark of the promotional program is the work with schools to acquaint youngsters with the apple and start early in their lives the habit of "an apple a day." *The Gateway to Health* film, which depicts how apples play an important part in growing bright, shining teeth, is one of the most widely-distributed films of its kind in the world. In addition, a new film strip was shown at the meeting carrying a similar message. Available at small expense, the film strip is aimed at primary school children.

But the real evidence of the gaining momentum of the NAI promotion was the report of the thousands of requests by teachers for the teaching aids provided free by the institute. Aimed squarely at the deleterious effect of sweets and pops on

SARONG FAMILY-PAK

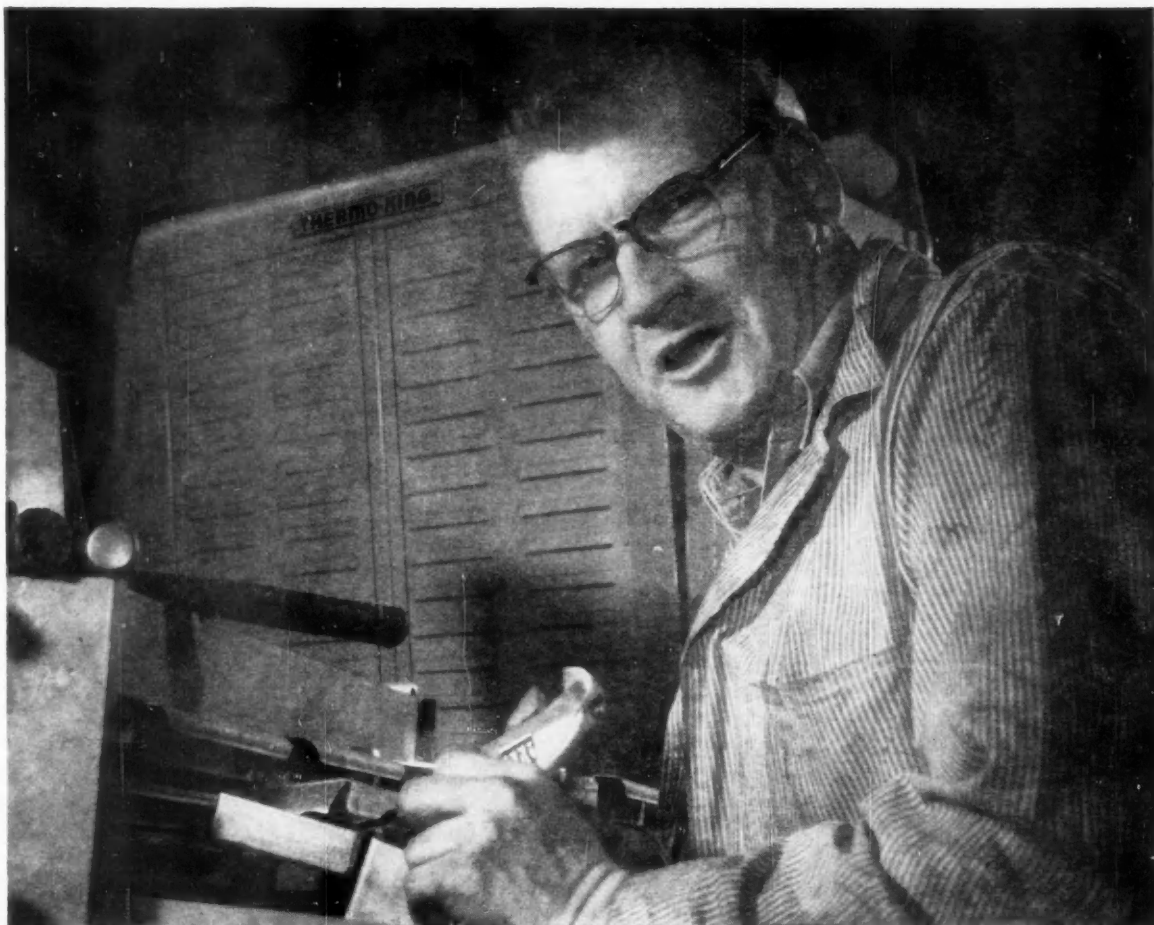


Triplet Tray currently undergoing apple marketing research can be cut into separate units to make single tray or Family-Pak consumer packages at retail, saving retailer cost of packages and simplifying operations at the packing plant. Developed by Washington State Apple Commission, USDA, and Washington State College,



Photos: Fruit Industries Research Foundation

the trays can be shipped in master containers. Family-Pak (at right) is banded with "sarong" of tough polyester film, Mylar, and handles are stapled together. New consumer pack promises to move large volume of fancy grade apples.



22 minutes, 6 bolts, and she's ready to roll!

It never takes long to repair a Thermo King unit. Rigs roll in—we fix 'em right quick, or put in a fast replacement. And out they go, sometimes in minutes.

No need to disturb the cargo. No waiting for parts. No long replacement worries. You won't believe it, but we can change out a whole unit—from the outside—by just unscrewing 6 bolts!

Service is a big thing with Thermo King. It's the only outfit in the business that backs you up

with service all over the country. You can find a Factory Authorized Service station like ours along every truck route in the States and Canada. And besides that, a fleet of Thermo King station wagons with engineers will help you out of a rough spot in an emergency day or night.

Like I learned back at the factory school: Thermo King truck refrigeration units are the best in the world. A supply of factory parts and guys like me help keep them that way.



First Name in Truck & Trailer Refrigeration

44 South 12th Street, Minneapolis 3, Minnesota

British Commonwealth: Canadian Thermo Control Co., Ltd. Montreal, Quebec

For all your

SPRAYER NEEDS

It's Still . . .

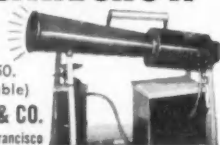


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Positive protection. Uses carbide or acetylene. No pilot. Retail \$59.50. (Dealerships available)

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The AP-PEACH PICKING BAG

Saves Time — Reduces Bruising
Heavy canvas over rigid frame protects fruit. Empties quickly through bottom. Especially for peaches and easily bruised apples. Write for folder.

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Eliminates buck raking and hauling!



Perfect for
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Does all orchard
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- Cutter extends 5-1/4 ft. to right of hitch point
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- Mows up to 4 acres per hour
- Shreds all prunings up to major cuts . . . chopped residue quickly returns to the soil

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Specialists in the Manufacturing of
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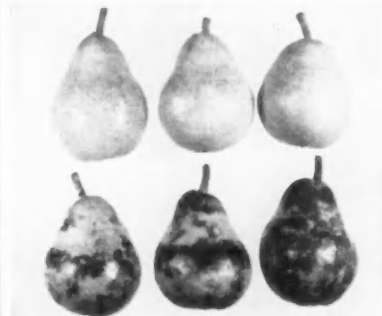
Pears

New Packing Method

PEARS can be expected to arrive at distant markets in better condition and at lower packaging costs when mechanically packed in cartons than when hand wrapped and hand placed in standard wooden pear boxes.

This evidence was indicated in a series of test shipments from California to East Coast markets during the 1957 Bartlett season. The new packing method was also evaluated in 1956 laboratory tests which revealed that proper padding and pressure closing of the container eliminated surface bruising of the pears.

The new packing procedure is to fill containers mechanically, vibrate them to settle the fruit, line the carton with an excelsior pad, and then staple the top of the two-piece telescope carton to the body while applying from 200 to 600 pounds pressure. This makes a tight pack-



Bartlett pears after 1 1/2 hours of vibration. Upper: with padding; lower: without padding.



Pears in place in mechanical-fill container. Photo was taken on arrival of fruit in market.



Two-piece telescope container used for pear shipments. Note staples near bottom of sides.

age which will keep pears from moving within the container during transit.

The successful tests were conducted with cooled fruit loaded solid in the rail car. Some pears shipped from California are loaded warm and cooled in transit. These latter shipments require some sort of air space between containers for cooling. Tests conducted with spaced cartons last season were unsuccessful because the containers bulged into the air spaces.

Further laboratory research by Dr. Noel F. Sommer of the pomology department and Rene Guillou of the agricultural engineering department of University of California as well as the author indicated that it might be possible to use a chimney load with proper carton venting and achieve satisfactory cooling enroute. —F. Gordon Mitchell, Ext. Marketing Technologist, U. of Calif., Davis.

Nuts

Eye New Outlet

CHINESE chestnut growers are eyeing consumer markets as outlets for their large crops. Up until last year, most of the crop went to nurseries for the production of seedling trees.

This demand seems to be satisfied, and several members of Northern Nut Growers Association with sizable plantations sold most of their large crops last year for eating. Some of their observations and pointers on selling Chinese chestnuts on consumer markets are listed by William J. Wilson, Fort Valley, Ga., in NNGA's *The Nutshell*, as follows:

Chinese chestnuts are unknown in the terminal markets.

Although Chinese chestnuts can compete in the markets with Italian chestnuts, they must sell at Italian prices until quantity shipments are made and a reputation established.

The closer the market is to New York, the cheaper will be the price received.

Italian chestnuts are shipped in 80- and 100-pound kegs. If adopted by all Chinese chestnut growers, the 1/2-bushel basket would serve to help the trade in identifying the product.

Containers should be identified with labels or tags bearing the name of the product as well as the name and address of the grower.

Supermarkets are a big potential Chinese chestnut market.

Nuts should be harvested each day, rain or shine; washed; and put immediately into cold storage in

AMERICAN FRUIT GROWER

proper containers. They should be left in storage at least three weeks to improve quality and give longer store life.

Mail order business is good, but cost of handling requires a selling price of 40 to 50 cents per pound.

The retailer must be educated in displaying chestnuts. Refrigerated, moist display doubles shelf life.

Nuts from well-cared-for grafted trees bring a nice profit at 20 to 25 cents per pound, with volume production.

Ship to the same commission merchant so he becomes familiar with your product. THE END.

THE QUESTION BOX

Don't be perplexed! Send us your questions—no matter how big or small. A three-cent stamp will bring you an early reply. Address: The Question Box, AMERICAN FRUIT GROWER, Willoughby, Ohio.

WINE MAKING

Where may I obtain recipes for home wine making?—Arkansas.

From the book, *American Wines & Wine Making*, by Philip M. Wagner which is available from AMERICAN FRUIT GROWER's Book Department for \$4.50.

CHERRY POLLINIZERS

Of the sweet cherries, which do you consider the best pollinizer?—Ohio.

Black Tartarian and Windsor are good general pollinizers; but since there are specific incompatibilities among varieties of sweet cherry, you should submit your question to your local state experiment station (Ohio Agricultural Experiment Station, Wooster) for specific recommendations.

NUT GROWERS GROUP

Is there a nut growers' organization to which I can write for ideas on storing chestnuts?—Pennsylvania.

Try Northern Nut Growers Association, 2338 Parkview Ave., Knoxville, Tenn.

NEW BLACK RASPBERRY

Where can I buy plants of the new Somo black raspberry?—Indiana.

Try Dr. Paul Shepard, Missouri Fruit Experiment Station, Mountain Grove, Mo.

ROADSIDE MARKETING

Where can I obtain information on roadside selling and stand construction?—Georgia.

There is a good book available for \$2.00 from AMERICAN FRUIT GROWER's Book Department entitled *Profitable Roadside Marketing* by Donaldson & Johnstone. Also, blueprints on roadside stand construction are available from our Plans Department for \$2.00.

HORTICULTURE BOOK

Do you know of a new book on horticulture from which I could learn about propagation, pruning, transplanting, etc?—Missouri.

A basic horticulture book has recently been published entitled *Horticulture Laboratory Manual* by Charles V. Hall. It sells for \$2.25. Among other good ones are: *Deciduous Orchards*, by W. H. Chandler (\$6.50) and *Fruit Science*, by Norman F. Childers (\$6.50).

These books may be available at your public library. They can be ordered through Book Department, AMERICAN FRUIT GROWER, Willoughby, Ohio. Remittance should accompany your order.

AUGUST, 1958



Use the easy way to CONTROL BORERS

The best way to control BORERS—in fruit trees, shade trees, and ornamentals—is to use the simple Para-Scalecide method.

Just dilute with seven parts water and apply to affected parts with paint brush or force feed oil can. For peach borer pour around the base of the tree.

One application does a thorough job for the season. Safe to use on both young and old trees.

Get Para-Scalecide now at your seed, hardware or garden supply store. 1/2 pint, 85c; 1 qt., \$1.69; 1 gal., \$3.98.*

If your dealer does not carry Para-Scalecide, we will deliver it by parcel post.

*Prices slightly higher West of Mississippi River.

Send for free circular "Controlling Peach Borers"

B. G. PRATT CO., 202 TWENTY-FIRST AVE., PATERSON, N.J.



Be Sure With GREENING'S TREES

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- ALL ORDERS GUARANTEED
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The Greening Nursery Company, one of the leaders in bud selection, have for over 100 years given all growers the benefits of their research and improved strains which mean greater orchard profits.

AGENTS

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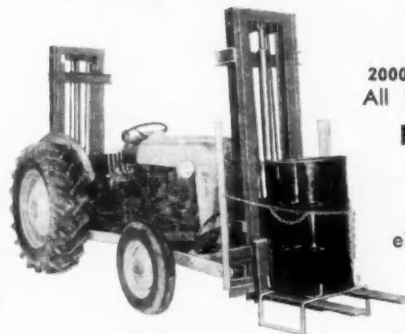
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All heights—side shift—hold down

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Stone Fruits

PEACHES

May Cut Shipping Losses

PREPACKAGING peaches in polyethylene plastic containers may cut losses during long shipping distances and provide consumers with an attractive, high quality product.

In preliminary research at University of Arkansas Agricultural Experiment Station, Fayetteville, Dr. A. A. Kattan and J. R. Morris developed an experimental package to overcome the negative features of bulk handling. Fruit is placed in plastic trays and overwrapped with perforated polyethylene film.

This package reduced weight losses during cold storage by about 60% and also eliminated surface shriveling and dullness usually encountered in bulk handling. The package is attractive, allows full visibility of fruit, and can be easily inspected at the retail level.

Results of tests indicate, report the researchers, that peaches prepacked in polyethylene can be stored and ripened successfully. A controlled ripening schedule may improve quality of fresh market peaches—especially that of less mature fruits which often reach consumers in poor eating quality. Grading for maturity at harvesttime would be essential to determine the proper handling schedule.

Ripening was enhanced when preceded by cold storage. This was most evident in reduction of fruit firmness and acid content, yet the incidence of storage rots was lower than when fruits were held in cold storage after ripening at 70° F.

These results are not yet final and research will be continued.

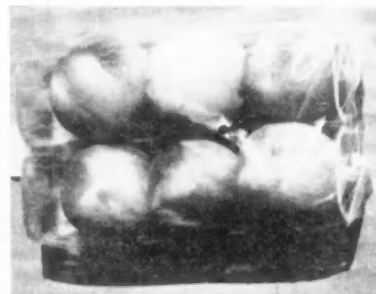
CHERRIES

57 Cents Less!

HIGH cost of packing sweet cherries in the Northwest by the face-and-fill method may cause a revolutionary change in the packing of this fruit.

With the help of Agricultural Marketing Research workers, growers and shippers in Washington State have found that it costs 97 cents for materials and labor to pack a single 15-pound box with a conventional double row-face of cherries.

A loose pack of 15 pounds of cherries cost about 40 cents for direct labor and materials last year



These firm ripe Elberta peaches were packaged in polyethylene on arrival in laboratory, stored and ripened successfully at 32° F. for seven days and then exposed to 70° F. for three days.

—or 57 cents less than the double row-face.

Main reason for the high cost of the faced pack, points out James B. Fountain, agricultural economist, USDA Agricultural Marketing Service, is that 300 cherries or more must be individually selected according to size and fitted by hand into perfect alignment to form two precise layers—the double row-face. After the face is completed, the remainder of the box is filled with loose cherries.

It takes the average worker 25 minutes to double-face and fill a box.

Cherries in the loose pack arrived in eastern markets in just as good condition as the cherries in the face-pack. However, the trade preferred the face-pack because of its greater sales appeal. Wholesale auction buyers discounted the loose pack about 85 cents below the face-pack. But marketing specialists point out that more and more cherries are being sold outside the auction markets.

At present, shipping containers of four different sizes are used in cherry packing plants: 10-, 12-, 15-, and 20-pound. On a per-pound basis, the loose pack in the 20-pound box is the least expensive.



Photo: Courtesy USDA
A beautiful but costly pack.

AMERICAN FRUIT GROWER

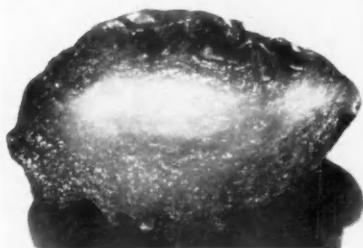
PRUNES

Harvest Early

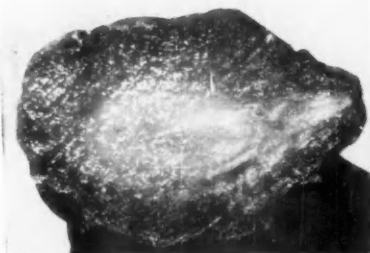
HARVESTING prunes when sugar content and flesh pressure indicate suitable fruit maturity results in top quality dried prunes.

That's the experience of California growers in Napa County. Last year the majority of growers who got an early start were almost through with harvesting before early rains began on September 28. Less than 5% of their crop was rain damaged, while severe losses were suffered by a number of growers who relied on traditional guides for starting harvest.

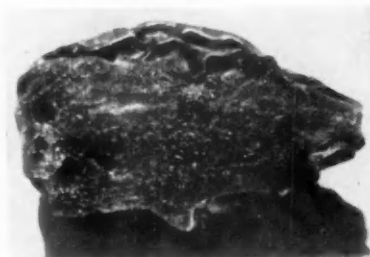
By measuring and recording sugar content and flesh pressure of



Prune picked early results in superior product.



This prune picked in midseason is overripe.



Prune picked late shows deterioration in quality.

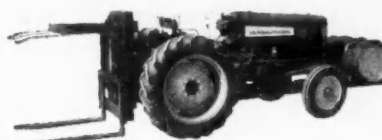
a composite sample of prunes, John N. Fiske, farm advisor, was able to advise growers to start harvest the last week in August. He also determines fruit maturity by the disappearance of chlorophyll from the flesh of the prune.

The farm advisor has charted the pattern of increasing solids (sugar) content and flesh pressure for the

AUGUST, 1958

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last five harvest seasons. These charts provide a basis for forecasting at least a few days in advance when harvest can be started.

Generally, optimum maturity is considered to be when the solids content is 25% and flesh pressure is 4.5 pounds.

The time of optimum maturity varies from year to year, according to the weather. Climatic conditions also affect prune maturity. Fiske's method of measuring maturity has proven an effective guide in starting harvest.

Delayed harvesting may result in deterioration of prune quality, reducing the grower's returns for his fruit. A superior quality dried product and beating possible early fall rains are not the only reasons for prune growers to adopt this system of maturity tests. Fiske points out. Completing the harvest as early as possible enables growers to be finished before the opening of schools and to make more efficient use of dehydrator facilities by extending the season. THE END

Grapes

Prepackaging Costs

SOME of the advantages and disadvantages of prepackaging at the retail level and at the grower level were pointed out to California growers and shippers recently by Donald R. Stokes and Philip W. Hale, agricultural economists, USDA Agricultural Marketing Service. Some of the points brought out by the research workers follow.

There are three fundamental reasons for prepackaging grapes: to reduce waste and spoilage losses; to decrease the total cost of marketing them; and to improve the condition of the grapes available to consumers.

Prepackaging grapes in retail stores offers a fine opportunity for grading out off-quality grapes; but on the other hand repackaging the grapes at either wholesale or retail level involves another handling of the grapes. Repeated handlings of grapes or other fruits contributes to their deterioration.

Waste and spoilage losses amount to 7% of retail value when grapes are handled in bulk. This loss can be reduced to about 4% if they are prepackaged at warehouse level or in retail stores. It is likely that these losses can be still further reduced if the grapes are prepackaged at point of production.

Labor expense to package grapes at the wholesale or retail level is ap-



Two of the most commonly used consumer packages for shipping California grapes.

proximately 1 to 2 cents a pound, which is greater than if they are prepackaged on a more efficient assembly line basis at point of production.

Consumer packages used for packaging grapes at shipping point also cost more as a rule than the packages used at the retail store level. Retailers often use a pulboard tray or a sheet of glassine paper, or a cellophane bag, which may be cheaper than the more protective-type packages.

More labor is required to prepackage grapes at shipping point than to pack them in lug boxes. Including labor, packaging materials, and machinery and equipment, USDA studies show that it costs about 45 to 60 cents more to prepackage grapes in 2-pound units than it does to pack them in conventional lug boxes.

Berries

Small Fruits Day

INTEREST in small fruits is increasing, as indicated by the attendance at the recent fifth annual Small Fruits Day at Ohio Agricultural Experiment Station, Wooster. More than 450 growers took advantage of this opportunity to visit the experimental plots and take part in the educational program.

More attention should be given to handling of the fruit after harvest, Donald Comin, station specialist, told growers. Berries may be kept 10 to 15° cooler than air temperature by putting them in a well ventilated shaded place. For maximum cooling, containers should be well separated. For short periods 55° storage temperature was suggested. Berries will keep longer at 32°, but the bright color is lost and berries tend to sweat when moved into a warm room.

Raspberry growers were cautioned about planting reds and black near each other because of the virus problem. The diseases are spread by

insects that move about in wind currents. Therefore, growers were advised not only to observe isolation but to plant blacks to the windward side of any red raspberry plantings.

Strawberry varieties were of major interest. The superiority in size and yield of the varieties Armore, Empire, and Erie was shown. Of the varieties under test, Sparkle and Pocahontas were reported as the best for freezing. As important as variety selection to the grower is plant selection. Virus-free plants were reported as best. Sparkle, which was discarded several years ago due to poor yields, is now producing well over 10,000 quarts per acre and is recommended when grown from virus-free plants.

The possibility of chemical weed control in small fruit plantings was demonstrated in grapes, strawberries, and blueberries. Excellent results were shown when SES (Sesone) was used in the development of strawberry plantings. Three years' results have shown that proper use of this chemical herbicide can cut the hoeing time in half without reducing yields or plant stand.

Excellent experimental results with Karmex DW and amino triazole in grapes and blueberries were also shown. With chemical weed control, the important thing is proper timing, the correct material, and careful application. With small fruits, it is a matter of preventing rather than overcoming the weed problem, it was pointed out.

Dr. Walter F. Jeffers, small fruits specialist from Salisbury, Md., spoke of the increasing possibilities for small fruit culture, especially near centers of population. Dr. Jeffers stressed the importance of practices to increase acre basis yields. Among the more recent developments to aid growers in obtaining better yields, which he indicated, were improved nursery stock, better plant holding techniques, superior pesticides, and more common use of irrigation.—R. G. Hill, Jr., Ohio Agr'l Exp. Sta., Wooster.

AMERICAN FRUIT GROWER



By HENRY BAILEY STEVENS

The Show Will Go On

I WENT to the recent meeting of National Apple Institute in Washington, D.C., with a feeling that high drama was in the air. With the NAI on the verge of an important breakthrough in consumer demand for apples, was it possible that there could be a disastrous split in our organizational ranks?

For many years apple growers have felt a lack of effectiveness in the fruit's national advertising program. It has seemed impossible to translate into scientific lingo our common faith in the apple's basic food value, and we have had to watch the king of fruits lose his title in the melee caused by the newer knowledge of nutrition.

The past five years have seen a most auspicious development in nutritional research. The payoff started with the *Gateway to Health* film featuring the findings of Dr. Fred D. Miller. Since then has come the general recognition by dentists of the great values of the apple in oral hygiene. Another step forward was the controlled experiment with students at Michigan State University, with its wide swath of resulting publicity.

Further evidence of progress appeared at the meeting: a catchy film strip aimed at the lower school grades; the new Walt Disney film on Johnny Appleseed; teaching guides for various age brackets; advertisements and publicity in professional journals; new broadsides for chain stores and National Apple Week; and a rousing report on apple health findings by Dr. H. F. Pierce, of Hartford, Conn.

Most important was the morale at the meeting. More than 20 states were represented by over 100 leaders, who exuded confidence and determination as well as a good-natured willingness to work out organizational problems in the proper spirit and to get on with the show. I left Washington reassured that the apple industry will keep up its new steam and will go ahead to significant new achievements.

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AUGUST, 1958

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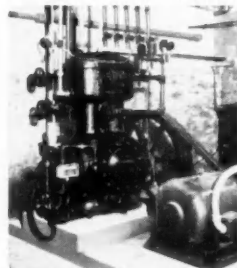
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See September Issue for Discussion on
the **LABOR PROBLEM** in the **FRUIT INDUSTRY**

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Butler Bros., Winchester, Va. recently converted a basement area, in one of the farm buildings, to a cold storage warehouse for apples.

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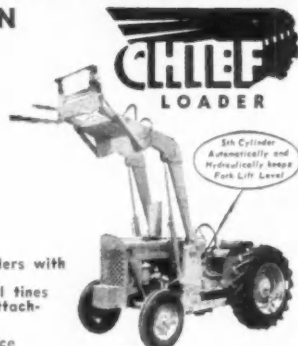
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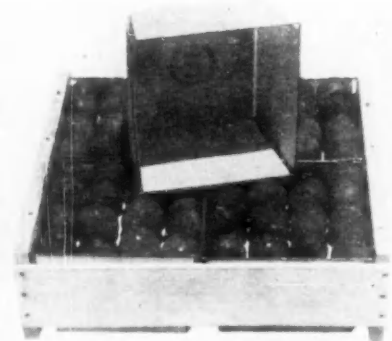
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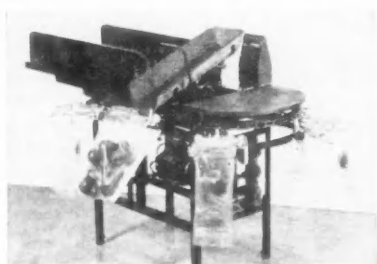
Paul Van Wormer, assistant general manager, Yakima Fruit Growers Association, says that "The savings we've made with the Float-Packer system in two seasons has convinced us: we have proven that costs can be lowered and the Float-Packer plays a major part in our cost-reducing program." The Float-Packer is a well-made machine which even inexperienced help can operate efficiently. To cut costs and packing damage, write Bruce Rose, Rose Manufacturing Co., 1714 South First St., Yakima, Wash., for full details.



Four-Basket Crate

Growers in California are using a four-basket plum crate which is proving to be extremely popular with shippers, packers, and chain stores. The nailed wooden package provides top protection as well as ventilation, and each of the four wooden veneer baskets are consumer-size units. Why not write E. Gorton Covington, The Wooden Box Institute, 55 New Montgomery St., San Francisco, Calif. He'll be glad to tell you where the box can be purchased in your area.

- Float-Packer System
- New Bagging Machine



Super Speed Bagger

Last fall I saw a new bagger operating in Michigan. The machine provides unbelievable hourly production and is very low in cost. Strongly made and flexible for all types of fruit, it is the answer for the grower who wants quality at low cost. If you will write T. V. Ellis, Cardinal and Ellis, Belding, Mich., he will send you all of the facts.



Pneumatic Box Dumper

Growers in the East and Midwest are finding that pneumatic pallet box dumpers are decreasing their cost substantially. Not long ago we saw such a dumper in operation. It was operated by an air compressor having a capacity of 1 cubic foot or more per minute and a maximum pressure of 125 pounds. By using compressed air, the necessity of high pressure hoses, pump, cylinders, and controls as well as the possibility of oil leaks were eliminated. The dumper has a maximum lifting capacity of 1200 pounds and sells for \$395 f.o.b. Why not write Norman French, Orchard Equipment and Supply Co., Hill St., Bristol, Conn., for full details.

AUGUST, 1958

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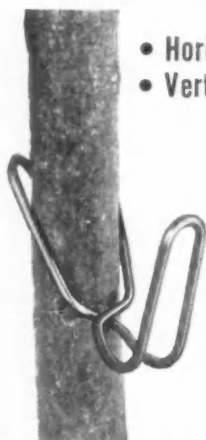
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LESS BRUISING

(Continued from page 12)

research, occurred through the pressure of the picker's fingers on the fruit.

3) The third job done was to prepare a series of cartoons for use in orchards and warehouses as well as leaflets for dissemination among growers and pickers. Many thousand copies of these were distributed through growers who gave them to their pickers when their employment was arranged.

4) The next item was to prepare a color talking film, illustrating the

WHEN TO HARVEST PEACHES FOR CANNING

1) Pick peaches at best maturity—five to seven days before fully ripe. Greatest tonnage and most uniform maturity come from two or three selective pickings.

2) USDA says fruit is firm ripe when it "yields slightly to moderate pressure. Flesh fairly palatable but has not reached prime eating condition."

3) Maturity tests: Firmness—varies considerably. Measures ability to resist bruising. Ground color—variable. Most peaches are picked by color once harvest begins in an orchard. Pit color—surface of pit should show at least 5% brown coloration.

4) Use combination of firmness, ground color, and pit color to decide when to begin picking.

5) Quality of canned product is limited by improper harvest maturity.

HOW TO HANDLE

1) Peaches are fragile. Handle them like eggs.

2) Mixing soft peaches with hard peaches causes more bruising.

3) Most bruising occurs during picking. Use cushions of fingers rather than finger tips when picking. Gently place fruit in picking containers and field lugs.

4) Best picking containers have rigid metal sides. Best field containers are shallow boxes with high ends.

5) Close supervision means less bruising, a higher quality product, and more money in the grower's pocket.

6) Every time boxes of fruit are handled there's a chance for more bruising.

7) Move fruit from orchard to cannery within 24 hours after picking—even immature lots.

HOW TO STORE AND RIPEN

1) For best quality, hold fruit at ripening temperatures (70 to 80° F. and 75% relative humidity) from time it arrives at cannery until processed.

2) These ripening conditions are ordinarily attained in the Yakima Valley by stacking fruit in open warehouses or in the open with covering shade. Severe rot often sets in if the fruit is ripened in closed rooms under high humidity.

3) Ripe lots of peaches can be held at 31-32° F. for two or three weeks. If cold storage is necessary, ripen to within one day of full-ripe before storage.

4) Rot remains Enemy No. 1 during the ripening process. Contamination may occur anywhere. The unbruised intact skin of the peach is its best protection against rot.

—From Stations Circular 273, Preventing Bruises on Freestone Peaches For Canning, by P. C. Crandall, Washington Agricultural Experiment Stations, Pullman.

importance of careful peach picking, both to the grower and to the industry. The film illustrated the techniques of proper peach harvesting.

5) Dr. Crandall also published a leaflet under the auspices of Washington State College Experiment Station on the subject of peach bruising.

Processors have indicated confidence in the peach harvesting improvement program by asking Washington State Fruit Commission to continue the program each season.

AMERICAN FRUIT GROWER

Citrus

Florida Packing Costs

FIGURES just released show the cost differences in packing Florida citrus fruits for the 1956-57 season. The information was gathered and compiled by A. H. Spurlock and Dr. H. G. Hamilton, economists with the Florida Agricultural Experiment Station, and is based on the records of 43 citrus packing houses.

The most expensive pack for oranges in common use in the season of 1956-57 was the 5-pound mesh bag in master containers. This cost averaged \$1.95 per 1 3/5-bushel equivalent. Next was the 8-pound mesh bag at a cost of \$1.70 on the same basis. A common type of master container is a cardboard box which will hold eight 5-pound or five 8-pound bags.

Lowest cost of packing and selling oranges was bulk by truck at 47 cents per 1 3/5-bushel equivalent. In general, oranges sold this way passed

through all the operations as fruit packed in containers, except that after grading and sizing they were loaded directly into the trucks by conveyor belt.

Packing costs included materials and labor, while the selling cost included only the expense of the firm's own sales organization. Brokerage commission and auction charges are not included.

Among wooden containers, wire-bound boxes were cheaper than the 1 3/5-bushel standard box which cost an average of \$1.51 compared to \$1.00 for the same size wirebound box. Cost of the 1 3/5-bushel wire-bound export box was \$1.32.

Grapefruit packing and selling costs were \$1.33 for the 1 3/5-bushel standard box, while the cost of the wirebound box of same size was 93 cents, and cost of bulk by truck at 42 cents for the 1 3/5-bushel equivalent.

Material was the largest single expense item. With grapefruit, material and labor took up 73% of the cost; with oranges, they averaged 65% of the total cost.

PREPACKAGING

(Continued from page 10)

(onions, cabbage, cucumbers, and peppers) appeared in at least 50% of the stores. Potatoes, oranges, apples, grapefruit, carrots, spinach, tomatoes were displayed prepackaged in over 95% of the markets.

According to this survey, 20% of the stores reported that their sales of prepackaged items amounted to at least 80% of their total produce sales. The amazing figure was that 47% of the supermarkets' produce sales were in prepackaged form.

Of these stores, the predominant level of prepackaging was at the store; next, at the grower level; and least packaged, at the warehouse or wholesale level.

About 63% of the stores sold apples prepackaged by the grower-shipper—not that 63% of apples sold were prepacked, but that 63% of the stores handled apples prepacked by a grower-shipper. Here are some figures which show the extent to which fresh fruits and vegetables are prepackaged:

92% carrots, 78% radishes, 69% cauliflower, 60% oranges, 56% potatoes, 48% grapefruit, 47% onions, 35% celery, 33% cherries, 27% spinach, 23% beans, 17% broccoli, 17% tomatoes, 7% peaches, 5% cabbage, 5% grapes, 5% corn, 2% lemons, and 1.5% lettuce.

According to a survey made by Service Wholesalers Division of United Fresh Fruit & Vegetable Association, 57% of its participating wholesalers have packaging

operations—an increase of 5% over 1955. About 62% of the members polled believe that eventually all fruits and vegetables sold at retail will be prepackaged. This same poll indicated that 76% of the members would be prepackaging by 1960.

Quite a number of members polled mentioned their belief that the proper place for packaging was at the point of shipping, but with a clear recognition that the farther away from the store the packaging takes place, the greater the care necessary on packaging and shipping.

Undoubtedly this is the phase of prepackaging that is of greatest interest to the transportation industry, for as more and more prepackaging is done at the grower-shipper level, the demands for better packaging and transportation facilities will be imperative.

Let us assume, then, that prepackaging of produce is here to stay—that more companies will be handling more prepackaged items, wherever they are prepacked.

Let us also assume that a few large stores will prefer in-store packaging; that more service wholesalers will be packing a broader group of items in greater volume, but each group will be looking to the grower-shipper to eventually take over the greater portion of this service, under the theory that this is the logical point to accomplish the greatest savings and achieve maximum efficiency. THE END.

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and

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SPECIALTY

Apples — M II VII IX

Pears — Quince A B C

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Medford, Ore.

T. B. West & Son

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SMALL FRUIT PLANTS

TREES AND SHRUBS

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TREES COMPLETE LINE

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• Flowering

• Shade

• Berry Plants, Roses, Bulbs

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PEACH
APPLE

TREES

LOW AS
20c

Cherries, Pears, Plums, Nut Trees, Strawberries, Blueberries, Dwarf Fruit Trees, Grapevines (10c), Shrubs, Evergreens, Shade Trees, Roses 25c up. Quality stock can't be sold lower. Write for FREE color catalog and \$2.00 FREE bonus information.

TENNESSEE NURSERY CO., BOX 4, CLEVELAND, TENNESSEE



APPEACH Deluxe

Rigid frame, canvas covered bucket designed especially for peaches and easily bruised apples. Excellent for other fruits. Shift front stays protect against jolter. Top large enough for picker to lay fruit in carefully. Bottom is quick-release type.

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HARDY PEACHES

Full Producers Despite 22° Below

AUGUST 23 to 28

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7 Mi. E. of Sigourney, Iowa
on 92; 3 Mi. S., & 1/4 Mi. E.

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Add to your income by selling AMERICAN FRUIT GROWER. It's a logical combination, for AMERICAN FRUIT GROWER will help your customers get the best results from the nursery stock you sell them.

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EDWARD MEISTER, Circulation Manager
AMERICAN FRUIT GROWER
WILLOUGHBY, OHIO

GROWERS OPPORTUNITY PAGE

Only 25¢ a word for one-time insertion; 20¢ a word per month for two-time insertion; 15¢ a word per month for four times or more. CASH WITH ORDER. Count each initial and whole number as one word. Copy must be in the 15th of the second month preceding date of issue. You can use our companion publication, AMERICAN VEGETABLE GROWER, in combination with AMERICAN FRUIT GROWER for only 5¢ a word more.

AGENTS WANTED

RUN A SPARE-TIME GREETING CARD and Gift Shop at home. Show friends samples of our new 1958 Christmas and All Occasion Greeting Cards and Gifts. Take their orders and earn to 100% profit. No experience necessary. Costs nothing to try. Write today for samples on approval. REGAL GREETINGS, Dept. 4, Ferndale, Michigan.

FREE RETAIL AND WHOLESALE PRICE list on used clothing. Box 44, Knickerbocker Sta., N. Y. 2, N. Y.

BOOKS

THE HOW-TO BOOK ON STRAWBERRIES. The layman's primer, the professional's reference and everyone's factual guide to more and better strawberries. \$1.50. AMERICAN FRUIT GROWER, Box 159, Willoughby, Ohio.

FOR EDUCATION, PLEASURE AND profit, read "ADVENTURES IN BEEKEEPING." A true story. \$2.00. ROBERT OGLESBY, R.R. 1, Middletown, Ohio.

BERRY BOOK: "THIRTY YEARS OF BERRIES." Raspberries and Strawberries. 84 pages, price \$1.00 P&H. ROY TURNER, 1525 S. Livingston St., Peoria, Ill.

BUSINESS OPPORTUNITIES

FREE PICTURE FOLDER, "HOW TO MAKE \$1,000 Yearly, Sparetime, Raising Earthworms!" OAKHAVEN-25, Cedar Hill, Texas.

UP-TO-DATE SWISS HYDRAULIC CIDER and wine presses. Pasturizers. You'll get more juice per fruit-pound. Write to: RUD. ZORN, 509 W. Fifth Street, Los Angeles 13, California. EARN CASH FROM STRAWBERRY SALES! Get our How-To Book on Strawberries that gives common sense treatment of the must and must-not in strawberry culture. Fully illustrated. \$1.50. AMERICAN FRUIT GROWER, Box 159, Willoughby, Ohio.

SACRIFICING NURSERY, RETIRING! ESTABLISHED 1918, 40 acres; nursery stock, Filices, office buildings, large packing sheds, barn, other buildings. PLUS 3-story modern brick colonial home, full basement, double garage, West Coast, federal highway location. AMERICAN FRUIT GROWER, Box 192, Willoughby, Ohio.

CIDER MILLS—PRESSES

MODERN AUTOMATIC ELECTRIC CIDER presses for roadside stands and small orchardmen. Presses 10 gallon to 15,000 gallon capacity. Everything for the cider maker, ball bearing graters, press racks, cloths, packing, valves, labels, filters, pasturizers, bottling equipment. Write for supply catalogue. W. G. RUNKLES' MACHINERY CO., 185 Oakland St., Trenton 8, N.J.

SANITARY CIDER MAKING EQUIPMENT. Write for our latest catalog showing containers, filters, cider supplies, filters, Palmer presses and parts for all mills—featuring the newest of Easy to Clean high capacity graters. ORCHARD EQUIPMENT AND SUPPLY COMPANY, Hill Street, Bristol, Connecticut.

CIDER MILL SUPPLIES; USED PRESSES. Cylinder packings, hydraulic cylinders, hydraulic pumps, nylon and cotton press cloths, press racks, complete engineering service available along with all types of used processing equipment for apple juice industry. Write for our prices. DAY EQUIPMENT CORPORATION, 118 W. Lafayette St., Goshen, Indiana. Ph. 3-1692.

HYDRAULIC CIDER PRESS, 20" RACKS. Also pressing cloth washer. N. C. JOHNSTON, Columbia City, Indiana.

CIDER PRESSES MADE. PRICE \$175.00. Order early. C. E. DUGAN, 7406 S. E. Woodward, Portland, Oregon.

MT. GILEAD 22" HYDRAULIC, 3 H-P A. C. motor complete with elevator, racks and cloths like new. In good condition. Replaced with larger size. MOSSLEY HILL ORCHARDS, Box 171, Barrington, Illinois.

ENLARGEMENTS

TWO BEAUTIFUL OILCOLOR 8x10 ENLARGEMENTS from any photo or negative (returned) \$1.00. PORTRAITCO, A780, Sweetwater, Texas.

FOR SALE—EQUIPMENT & SUPPLIES

SAVE up to 40% on—CHRYSLER INDUSTRIAL-IRRIGATION UNITS. Our own special irrigation unit costs only \$1695.00, and includes CHRYSLER'S big 354 cubic inch V8 engine plus all the accessories to make it run. 6 cylinder units as low as \$1395.00. Write for information. Dealer inquiries invited. Midwest Parts Corporation, Box 394, Gary, Indiana.

BUY SURPLUS DIRECT FROM GOVERNMENT at tremendous savings. farm tools, machinery, truck, jeep, tractor, power units, householders listed in our bulletin. Price \$1.00. GOVERNMENT SURPLUS SALES, Box 169ARG, East Hartford 8, Conn.

SEVERAL GOOD USED POWER SPRAYERS (Myers and Bean) which have been traded on new Myers Concentrate Sprayers to our Ohio dealers. Let us know your needs. WATER SUPPLIES, Ashland, Ohio, Phone 21563.

CHRYSLER ENGINES AND PARTS for John Bean and Speed Sprayers plus other equipment, in stock. Immediate delivery. Midwest Parts Corporation, Box 394, Gary, Indiana.

70,000 NEW CRATES, SPEED SPRAYER, Bean Royal 35 P.T.O. Sprayer, 35, 50, 55 Royal Bean Pumps, Niagara Duster, Grader, Cleaner, Packing House Equipment, Bomber Tires and Tubes, Bargains. CORY ORCHARDS, Cory, Indiana.

SENSATIONAL GARDEN TRACTOR. HOES between plants and rows, including strawberries. Eliminates hand hoeing. Nothing else like this. Patent 2742840. Also tills. Fantastic offer to first few inquiries. AUTO HOE, DePere 8, Wisconsin. New and remanufactured INTERNATIONAL HARVESTER ENGINES and POWER UNITS. Special spring clearance sale. Midwest Industrial Company, 835 N. Capitol, Indianapolis, Indiana.

FRUIT TREE OWNERS. BE WISE! EQUIP your trees with our SIMPLEX re-enforcing ring. It lasts a life time—makes weak trees strong. Prevents storm damage and carries the fruit load to maturity. Do-it-yourself plans, one dollar. We sell essential parts (patented) at rock bottom price. For full information, write L. P. CALDWELL, Box 408, Independence, Missouri.

APPLE PEELER, SLICER AND BATH. All stainless steel. Hoopstown, complete unit for processing apples. Priced to sell. Write for particulars. MOSSLEY HILL ORCHARDS, Box 171, Barrington, Illinois.

MYERS SPRAYER, 25 GPM. WISCONSIN motor, airplane tires, with blower attachment. Complete unit in good condition. MOSSLEY HILL ORCHARDS, Box 171 Barrington, Illinois.

GARDEN SUPPLIES

PROTECT YOUR BERRY CROPS. CHEESE-cloth 100 yards by 48" in convenient 15 yard lengths. \$7.00 prepaid. 50% less mill price. MIDCITY, 138 East 34th Street, New York.

INVENTIONS WANTED

ARE YOU INTERESTED IN OFFERS FROM reliable manufacturers for your invention? Patented, unpatented. HARVEY ASSOCIATES, Dept. 7A, Cambridge, Maryland.

MISCELLANEOUS

BANANA PLANT, GROWS ANYWHERE.—Indoors, outdoors. \$1.50. Postpaid. P. SULEN, Ladylake, Fla.

1,000 BUSINESS CARDS \$4.00. THREE LINE rubber stamp \$1.00. REGAL, Crooksville, Ohio. COMPLETE 15-YEAR FILE OF AMERICAN FRUIT GROWER editions. \$25.00 f.o.b. Kansas City, Kansas. Write AMERICAN FRUIT GROWER, Box 190, Willoughby, Ohio.

FREE SAMPLE RAZOR BLADE. FROM Germany. Revolutionary accomplishment. First time in USA. PAUL WEIL, Dept. A29, Box 152, New York 31.

OF INTEREST TO WOMEN

LEARN PROFESSIONAL CAKE DECORATING. Details free. DECO-SECRETS, Venice 33, Calif.

QUILTING? REMNANTS? SAMPLES. Three yards nylon \$1.00. RAISBOW, Esell Springs, Tenn.

SEND DIME FOR CATALOG. UNUSUAL gifts. MYCO, Dept. AFG, Rummenell, New Jersey.

NEW BATHROOM DEODORIZER, HANGS on wall. Banishes odors bathroom, kitchen. Lightening seller. Samples sent on trial. KRISTEE 100, Akron, Ohio.

STAMPED LINES FOR EMBROIDERY OR painting. Buy direct from manufacturer and Save. Send for FREE catalog. MERIBEE, 16 West 19th St., Dept. 711, New York 11, N. Y.

ORCHARD FOR SALE

5 1/2 ACRES FARM, MODERN 2-BEDROOM house, telephone, electric, new big barn, 2 miles to town, \$15,000 which includes all furniture, farm machinery, etc. Write BOX 51, Field City, Fla.

600-ACRE PEACH GROVE! YIELDS 100,000 to 125,000 bushels annually! Last year's crop sold for reported \$150,000! Priced well below true market value at \$90,000. Better HURRY! 857-acre farm, 30,000 peach trees, first class condition, entire orchard under sprinkler irrigation, 5 lakes. Six tractors, all other orchard equipment included! On U. S. highway, in beautiful OZARKS with mild climate ideal for fruit crops. Only 1/4 mile outside village. Four-room owner's house, 4 tenant houses. Three implement sheds, 2 large storage buildings, 7,500 sq. ft. peach grading shed. Doubled to over 40-shed price to effect quick sale, now going for only \$90,000 complete, less than one third down. Immediate possession. Free FALL Catalog, bargain coast to coast! UNITED FARM AGENCY, 1304-AG, Consumers Bldg., Chicago 4, Ill.

OHIO FRUIT FARM, 120 ACRES, 70 ACRES apples, peaches. Well located, Cleveland market. Fully equipped. Modernized home. Good packing house. Cherry retiring. Inquire AMERICAN FRUIT GROWER, Box 191, Willoughby, Ohio.

PLANTS & SEEDS

NEW HYBRID DAYLILIES BLOOM 24-48 hours. Seeds, 20 for \$1.00. PHILIP O. RUCH, 104 Rockaway Ave., Rockaway, New Jersey.

RABBITS

RAISE ANGORA, NEW ZEALAND AND RABBITS or mink on \$500 month plan. Free details. WHITE'S RABBITRY, Delaware, Ohio.

TRADE MARKS

NATIONAL TRADE MARK COMPANY, Munsey Building, Washington 4, D.C.

WANTED TO BUY

WANTED: HERCULES JXD MOTOR BLOCK assembly. Must be good condition. A. ROY FISHER, Hwy. 33, Star Route, Freehold, N. J. WANTED: CONCENTRATE SPRAYER GOOD condition. WILLIAM WARGO, 25230 Riverdale Drive, Dearborn, Mich.

NIAGARA BRUSHER AND NIAGARA polisher 24", must be in good condition. MOSSLEY HILL ORCHARDS, Box 171, Barrington, Illinois.

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BUY, SELL AND TRADE—Readers and business firms will get top advertising value at low cost from AMERICAN FRUIT GROWER "Opportunity Ads." These classified ads are widely read, widely responded to by AMERICAN FRUIT GROWER's high-income readers throughout America. Our classified advertising department will run your ad under any heading and will guarantee correct insertion.

RATES—For one insertion, 25¢ per word. For two insertions, 20¢ per word per month. Four insertions, 15¢ per word per month. Count each initial or whole number as one word. CASH WITH ORDER. You can use our companion publication, AMERICAN VEGETABLE GROWER, in combination with AMERICAN FRUIT GROWER for only 5¢ a word more.

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AMERICAN FRUIT GROWER
WILLOUGHBY, OHIO

AMERICAN FRUIT GROWER

Right Under Your Nose

"THE answer to apple marketing problems is right under the grower's nose and he doesn't see it," says Dr. H. M. Love, chairman of department of agricultural economics, Virginia Polytechnic Institute.

Processed fruits are being substituted for fresh fruits. Many growers continue to think of processed apple products as by-products. They are not. They are mainline merchandise.

Dr. Love maintains that growers have wide-open opportunities to get more for their apple crops through processing outlets. "By selling Mrs. Consumer on the idea of eating apples and apple products as a healthful food and for pleasure, you can expand your market far beyond the present capacity of your industry," he reports.

Working on Fall Promotion

HERE'S how Western New York Apple Growers Association, Inc., will tell its story in fall promotion work.

A 13-minute color film for television use beginning in September covers the Western New York apple industry from tree planting to retailing apple sauce and apples. Special care has been taken to include the beauty of orchards in bloom-time and at harvesttime.

Brand-Name Promotion

RECOGNIZED quality standards and brand-name promotion from field to consumer are needed to give fresh fruit

MARKETING

AN AMERICAN FRUIT GROWER REPORT

growers a greater and more profitable share of expanding food markets, says package specialist Joseph C. Lowey, W. C. Ritchie and Co., Chicago.

Brand identity, he emphasized, is basic, for the product sells itself without the help of a sales person and doesn't need anyone to dispense or wrap it.

A package with a clear window, attractive colors, interesting message, and protective and convenience features can give fresh fruit new sales appeal, he pointed out. "It can suggest a variety of uses, carry recipes, show that delicious pie or salad."

Another appeal is that a package will also keep the fruit fresh longer. Pre-washed, pretrimmed, or otherwise processed, the fruit will be ready for immediate use.

A mass display of fresh fruit in packages can catch the eye, Lowey added.

It's Inexpensive

AN excellent way to promote the sale of apples is available to all growers who bag their fruit.

Pack a circular in each bag, giving the name of the orchard, as well as the variety and grade of apple. Include an

appetizing recipe, or list a dozen or more varieties and their culinary uses.

Peach-of-a-Stunt

GEORGIA peach growers are right in there pitching. Take the recent promotional stunt staged at the Macon airport, for example.

For one week this summer passengers arriving at the airport were presented fresh, tree-ripened Georgia peaches by attractive girls. R. L. Livingston, secretary of Georgia Peach Council, said the peaches were provided by growers in the south Georgia area, in co-operation with the council.

Each bag filled with two peaches carried the slogan, "It's Peach Time U. S. A. Georgia Peaches are Nutritious and Delicious. Eat Them."—Pauline T. Stephens.

Harvest Moon Supper

TAKE a look at the gigantic 1958-59 cling peach and fruit cocktail advertising and promotion program planned by Cling Peach Advisory Board, San Francisco, Calif.

The kick-off promotion in October will get off to a gala start with a Harvest Moon supper, sponsored jointly by Cling Peach Advisory Board, Pet Milk Co., and Quaker Oats Co.

The \$1.5 million campaign will feature page color ads in national magazines, commercials on popular TV programs and a 100-station radio network, as well as extensive point-of-sale and display materials to be placed in retail channels.

BETTER CONTAINERS

(Continued from page 9)

at retail level from bulk containers, the bad peaches are either sorted out or hidden from view. The retail packages look fresh and attractive, and have a competitive advantage in both price and appearance over similar size consumer packages that are packed at production level.

Close to 60% of the peaches that are sold in the self-service stores in Ontario are sold in 1-quart berry boxes. The package is made up with eight 2¼- to 2½-inch peaches by putting three in the bottom, four on top (one in each top corner), and one in the middle of the top four.

This miniature-heaped container weighs around 2 pounds. All fruits can be seen easily and inspected by the customer. It sells for 29 to 39 cents, depending upon the time of the year and the price of American peaches imported in bulk containers.

The check-out girls transfer the peaches from the 1-quart berry boxes to paper bags, and the empty boxes are sent back to be refilled and resold again and again. In this way the container cost to the retailer is kept close to zero.

To cover costs of container and master container, a similar size package of eight peaches, when packed at point of production and sold through the wholesale trade, has to be sold at retail level for at least 8 cents more.

There are better consumer con-

tainers available. However, because of the initial costs of the better containers and the master containers needed to ship them, the eight-peach berry box continues to hold the inside track.

Transportation of the peach is difficult. A container suitable for shipping peaches to distant markets must be one that the trade is willing to buy. It must protect the fruit to the ultimate destination. Protection to the distant terminal markets while the fruit is in a solid condition is not enough.

After having arrived at wholesale distributing points, peaches soften up rapidly. When soft or partially soft peaches are trucked from terminal markets to outlying retail stores, some of which may be more than 100 miles away, serious bruising will result unless the containers are adapted for carrying soft peaches. Good protection is essential during this last lap.

The standard Los Angeles lug, with dimensions 13½ x 16½ x 5¾ inches, is the best all-round container. It is a favorite with the wholesale and retail trade alike. Peaches, when shipped in cup-packed LA lugs, arrive at ultimate point of destination (the retail fruit counter) in a sound, clean, and attractive condition.

The lug excels in the delivery of fairly ripe peaches to distant markets. In Ontario, Essex County peach growers successfully ship tens of thousands of these lugs annually, packed with soft Jubilee peaches, to

the canneries located more than 100 miles away.

The success of the LA lug package of peaches is due to some extent to the two-layer crinkle cup style of packing. The crinkle cups absorb transportation shock as well as prevent dark rub spots on hard fruit and bruises on ripe peaches.

Retailers like to buy lugs of cup-packed peaches because they arrive in good condition, stack easily, and save storage space. At the fruit counter, lugs packed with colorful peaches make a beautiful mass display.

Eye appeal in a supermarket is buy appeal. Many self-service stores find it convenient, profitable, and labor-saving to place the lugs on the fruit counter for the consumer to select her peaches from the original container.

The system of designating the size of the peaches by the number of peaches in a container, as used in packing lugs, makes the lug especially satisfactory for supplying retailers with this information.

At the production end, no other container is better adapted for lift truck pallet handling and car loading. No other container is more easily packed and stacked. It is adapted for packing all sizes of peaches from 2 inches up to the largest grown. To give big peaches more room, riser cleats are added to the ends. When peaches are very large, the lug is double cleated. THE END.

The Soliloquy of An Apple Tree

IT took a lot of doing to get me where I am. To be sure, I am only one of the millions of others—of many races, creeds, and colors—that live all over the world—some perilously in high, cold reaches of the mountains—some in fertile valleys—some under difficult surroundings—some growing giant with tremendous spread, roots deep in the moist, cool, comfort of Mother Earth—branches lifted upwards to the glorious clouds and the brilliant sunshine.

I come from an ancient and proud lineage. From the Caucasus region of Eurasia my ancestors spread all over the world. I traveled with Alexander of Macedonia centuries before Christ. The Chinese dynasties knew me centuries before that. The early Lake Dwellers of Europe enjoyed my fruits. I was included in the Garden of Eden.

In time, I came to America, brought by early settlers from Europe. Those who loved me, like Johnny Appleseed, spread my seed throughout the land. I traveled across the great North American continent in covered wagons. I became part of the great American tradition.

Little by little, through toil and painstaking care, the best of us were set aside to be specially propagated and tended for commercial production. We have seen the mechanical and scientific genius of America applied to protecting us from pests and producing attractive and health-giving fruits, which were washed, graded, packed, stored, transported, displayed, and sold, to bring wealth and prosperity to the men who took care of us best.

Long ago, I was credited with "An apple a day keeps the doctor away." Only recently are men beginning to relearn this old truth. They now tell my virtues in preventing tooth decay, aiding in digestion, preventing colds, and generally helping men on the road to health.

But now I am disturbed. I learn

that there is danger of men forgetting, temporarily, such a thing as an apple. I learn that some men call themselves "growers," some "canners," some "freezers," some "tradesmen," some "Easterners," some "Westerners."

They seem to vie for position and control and pit one against the other. They seem to have forgotten that they all deal with the apple and that it is the apple upon which they all depend.

Somewhere in this land there must be dispassionate, statesmen-like leaders who can bridge the gaps and rally all forces harmoniously around me and my fruit—the International Apple Association, the National Apple Institute, National Apple Week, State Apple Commissions, State Apple Institutes. There is no room for anything but *unity of purpose*, even though this may mean separate organizations rather than one central one. It is the *unity of purpose* that counts, not necessarily the unification of man-made organizations.

I was here long before this generation came into power, and I will be here long after this generation has passed from the earth. If this generation is wise, it will unite around me, for I am an apple tree and my fruits are the apple, and I know—*H. B. Tukey*

Fruit Growing is Such Fun!



Fruit Talk

California, Washington, and Oregon produced two-thirds of the nation's strawberry crop in 1957, including most of the strawberries that are frozen.

Edgerton and Parker of New York state report a reduction in winter injury to nematode-infected Montmorency cherry trees when soil is fumigated to destroy the nematodes.

Phosphate insecticides are effective against insects because they are nerve poisons. Probing deeper, Smith and Wagenknecht of New York state show that the action on insect eggs is to prevent an enzyme from breaking down a toxic chemical which normally accumulates within the egg.

Some cherry growers received 6 cents a pound for the raw product in 1952 and 11 cents in 1954, yet the finished product sold for 13.4 and 15.9 cents a pound respectively, according to French and Shaw of Michigan.

Rasmussen of New Hampshire writes interestingly on what has happened to pest control in New Hampshire "during the last 30 years," describing the 1927 spray schedule as a four-page leaflet, listing three fungicides, two insecticides, and six spray applications—compared with the 32-page spray program of today, listing 15 insecticides and 15 fungicide combinations.

When thinning peaches, says W. J. Lord of Massachusetts, remember the number of peaches required to make a bushel: 380—2 inch; 280—2½ inch; 190—2½ inch; 145—3 inch; and 110—3½ inch.

During his six weeks of enforced idleness from a fall out of one of his 32-year-old apple trees, George Adrian of Indiana listed the advantages of dwarf trees over standard trees as 2:1, and concluded that the standard apple tree is "the most inefficient link in our entire production-marketing enterprise."

Illinois growers may now mark Golden Delicious as "Meets Illinois Maturity Standards" when approved as to color and size under standards set by Dr. Richard Lott of University of Illinois.

Elbertita is the name of a natural semi-dwarf, yellow-fleshed, clingstone peach originated by the late Prof. M. A. Blake of New Jersey, said to grow one-third to one-half the size of a standard Elberta.

Henneberry and Stuart of USDA find that mites are more easily killed by Malathion on healthy plants which are fed enough nitrogen, and are harder to kill on plants supplied no nitrogen.

Preliminary tests in California have shown improved fruit set of the Clementine mandarin, the Bears lime, the Eureka lemon, and the Washington navel orange following treatment with gibberellic acid.

H. B. T.

Coming Next Month

- The Harvest Labor Problem: How It Is Being Met in the East, West, South
- Maturity Standards for Golden Delicious in Illinois
- Peaches Thrive on Chelates
- How Tom Oyler Grows Cherries in Adams County, Pa.
- Dual-Purpose Apricots
- Why Florida Is Growing Lemons



THE MILLER AMENDMENT

...what it means to you

THE MILLER AMENDMENT to Public Law 518 sets limits on the amount of insecticide residues permissible on harvested crops. The Food and Drug Administration has established tolerances for *each* insecticide on *each* crop. Crops harvested with excess residues are subject to confiscation.

For insect control during the critical close-to-harvest period without residue problems, many states are recommending malathion sprays or dusts. Malathion can be used on apples, pears and plums up to 72 hours from harvest; on blueberries up to 24 hours... on all others, up to 7 days.

Here's why: malathion kills fast, thoroughly. Its residues disappear rapidly. And it has a high residue tolerance on most crops. All together, these features make malathion the ideal material for late season insect control.

Malathion controls major fruit pests...36 in all...including

aphids, mites, mealybugs, codling moth, leaf rollers, pear psylla and scales.

Offers safety in use. Unlike most other phosphate insecticides, malathion can be handled safely without respirator or special protective clothing. The USDA calls malathion, "...one of the safest insecticides to handle." And the U. S. Public Health Service says, "...the toxicities of malathion (oral and through the skin) are less than those of DDT."



With malathion, no respirator needed.

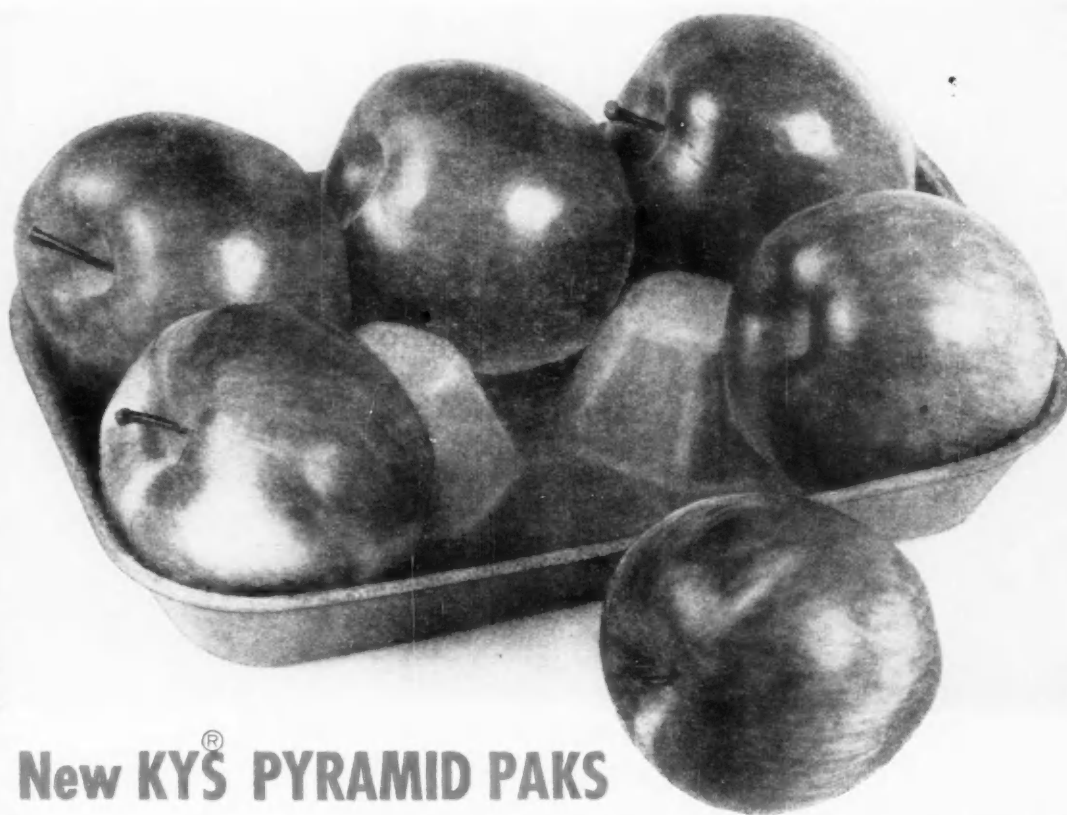


Many states specify malathion as the phosphate in fine finish programs because it offers a wide margin of safety to the fruit and foliage of sensitive varieties.

Compatible with other chemicals. Malathion is compatible with most other commonly used fungicides and insecticides.

For a free Malathion Handbook listing uses, rates, timing, etc., write: American Cyanamid Company, Agricultural Division, N. Y. 20, N. Y.

This advertisement was prepared by the manufacturers of malathion insecticides as a service to growers.



New KYS[®] PYRAMID PAKS for complete protection and sales-inviting display

Designed especially for prepackaging apples at the grower-packer level, PYRAMID PAKS give your fruit maximum protection during shipment. Pyramid-shaped posts with gently curved corners cushion each apple in its own separate pocket, eliminating contact bruises and unsightly surface creases. The purple color of PYRAMID PAKS and the high visibility they afford form a deluxe package which will help command premium prices.

- ★ Strong molded pulp construction.
- ★ Separate compartments prevent bruising.
- ★ Purple furnish contrasts with natural fruit color.
- ★ High visibility speeds consumer sales.
- ★ Three sizes: 80-100 (6-pocket), 100-138 (6-pocket) and 138-163 (8-pocket).
- ★ Readily adaptable to both manual and machine wrapping.

Be Wise-Buy



By the makers of famous
KYS-PAK[®] for apples and KYS[®] BERRY BASKETS

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